			315.7



#### ACIDIC PRECIPITATION IN ONTARIO STUDY

ANNUAL STATISTICS OF CONCENTRATION AND DEPOSITION -CUMULATIVE PRECIPITATION SITES IN INDUSTRIAL/URBAN AREAS IN ONTARIO, 1981 AND 1982

> Atmospheric Processes Studies Unit Air Quality and Meteorology Section Ontario Ministry of the Environment Air Resources Branch 880 Bay Street, 4th Floor Toronto, Ontario Canada, M5S 1Z8

> > March 1985

ARB-25-85-AQM API-005/85

A.P.I.O.S. Coordination Office
Ontario Ministry of the Environment
6th Floor, 40 St. Clair Avenue West
Toronto, Ontario
Canada, M4V 1P5
Project Co-ordinator: Dr. T. G. Brydges

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TD 195.54 .06 A562

1985

Annual statistics of concentration and deposition - cumulative precipitation sites in industrial/urban areas in Ontario

77586

#### **ACIDIC PRECIPITATION IN ONTARIO STUDY**

ANNUAL STATISTICS OF CONCENTRATION AND DEPOSITION -CUMULATIVE PRECIPITATION SITES IN INDUSTRIAL/URBAN AREAS IN ONTARIO, 1981 AND 1982

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#### **ACKNOWLEDGEMENTS**

This report was prepared by David Chung of the APIOS Atmospheric Deposition and Chemistry Program. However, the data themselves are a product of the combined efforts of many individuals. Precipitation samples were collected by a large number of site operators, whose names cannot be individually mentioned here, under the coorindation of the APIOS environmental technicians Steve Elliott (in Southwestern Region), David Allcock and Paul Kehoe (in Southeastern Region), Wim Smits (in Northwestern Region), J.P. Varto (in Central Region) and Bill Bardswick and Chris Hutt (in Northeastern Region). Sample handling was carried out by Dan Orr and Liane Skelton, and overall network coordination by Bill Bardswick of the Air Resources Branch. Chemical analyses were performed at the Laboratory Services and Applied Research Branch under the coordination of Frank Tomassini and Barry Loescher. All enquiries regarding the reported data should be directed to Walter Chan, Coordinator, Atmospheric Deposition and Chemistry Program, at (416) 965-1634.

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PART III	SUMMARY STATIS' CONCENTRATION	TICS OF PRECIPITATION BY STATION						
	Station	Map Ref. No.						
	Binbrook Burwash Canborough Dog's Nest East Germain Park Hanmer Lively North Dufferin South Canfield Toronto Villa Nova	01 07 02 03 10 08 09 04 05 11	1 9 17 25 33 41 49 57 65 73 81					
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	Station	Map Ref. No.						
	Binbrook Burwash Canborough Dog's Nest East Germain Park Hanmer Lively North Dufferin South Canfield Toronto Villa Nova	01 07 02 03 10 08 09 04 05 11	105 113 121 129 137 145 153 161 169 177					

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#### PART I INTRODUCTION

#### INTRODUCTION

The statistical summaries presented in this report pertain to the 1981 and 1982 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) cumulative precipitation sites in industrial and urban areas in Ontario. The relevant data are listed in a previous report, #ARB-26-85-ARSP. At the inception of the network, the period of collection was monthly, however, a 28-day accumulation period was adopted as of January 5, 1982. All available data are utilized in the calculations except results reported as being unreliable or If the actual result is greater than the reported value due to exceedance of upper analytical limit, then the reported value is also excluded. Reported results for metals which have missing leachate analysis are also excluded from statistical analysis. Results labelled as W are replaced by "zero". If a detection limit ( < or < T) is reported, a value corresponding to one half the detection limit is utilized for statistical calculations as reported in the statistical summaries. The reported cumulative precipitation gauge depth (or Environment Canada's CLIMAT result) is utilized in the calculation of deposition. precipitation gauge value is not available, then the collected sample volume is converted to its equivalent precipitation depth and is used in the deposition calculation.

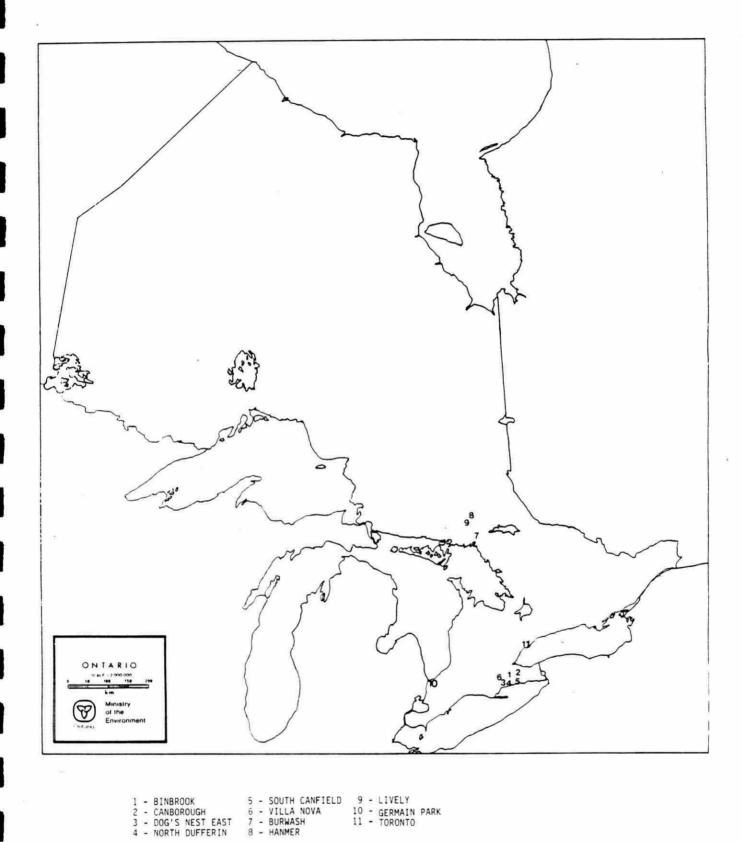
The statistical summaries presented in Parts III to VI include number of samples, mean (arithmetic/geometric), standard deviation (arithmetic/geometric), maximum, minimum, quartiles and precipitation weighted means using precipitation gauge depths where appropriate. These statistics are for an average sampling period. Data given in the listing report (#ARB-26-85-ARSP) which corresponded to irregular sampling periods were either combined if they were from consecutive collection periods which spanned  $28d \pm 5d$  or deleted, if otherwise, before the statis-tics were generated.

The regional statistical summaries are presented only of two regions (i.e., Haldimond-Norfolk Region and Sudbury Region), since other sites do not belong to other common regions. The 1981 statistical summaries always preced the 1982 statistical summaries for each station and each region.

#### <u>PART II</u> <u>STATION DESCRIPTION AND LOCATION MAP</u>

#### SITE DESCRIPTIONS OF STATIONS IN INDUSTRIAL/URBAN AREAS

MOE REGION	STATION NAME	(North)	LONGITUDE (West)	UTM GRID CO (Northing)	(Easting)
Haldimond- Norfolk (NEMP)	Binbrook Canborough Dog's Nest East North Dufferin South Canfield Villa Nova	43°07'06" 42°59'77" 41°48'40" 42°59'39" 42°55'39"	79 <sup>0</sup> 52'40" 79 <sup>0</sup> 38'42" 80 <sup>0</sup> 08'46" 79 <sup>0</sup> 58'38" 79 <sup>0</sup> 44'49" 80 <sup>0</sup> 12'13"	4774500 4760800 4739600 4759990 4752700 4753500	591400 611950 570200 583750 602600 565400
Sudbury	Burwash	46 <sup>0</sup> 15'46"	80 <sup>0</sup> 48'48''	5123000	514600
	Hanmer	46 <sup>0</sup> 39'45"	80 <sup>0</sup> 56'37''	5167400	504300
	Lively	46 <sup>0</sup> 26'45"	81 <sup>0</sup> 09'00''	5143400	488400
Other Sites	Germain Park	42 <sup>0</sup> 58'35"	82 <sup>0</sup> 23'00"	4758750	387250
	Toronto	43 <sup>0</sup> 39'15"	79 <sup>0</sup> 23'14"	4835500	630100



#### PART III

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY STATION

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81	φ.	<u> </u>		PAGE: 1	26
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		нм	UMHO/CM	LAD	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	11.0	10.0	11.00	10.0000	10.00	10.000	10.000
MAXIMUM	:	188.8	58.0	4.67	0.1466	6.50	1.140	1.170
MINIMUM	:	14.1	27.5	3.92	0.0616	3.80	0.420	0.160
RANGE		174.7	30.5	0.75	0.0850	2.70	0.720	1.010
ARITH. MEAN	:	78.8	42.0	4.17	0.1065	4.92	0.664	0.502
ARITH. STD. DEV	:	48.5	10.4	0.23	0.0276	1.05	0.204	0.341
GEOM. MEAN	:	64.9	40.9	4.17	0.1031	4.82	0.639	0.414
GEOM. STD. DEV.	:	2.0	1.3	1.06	1.3150	1.23	1.331	1.918
1ST QUARTILE	•	36.1	34.0	3.96	0.0838	4.02	0.495	0.235
2ND QUARTILE		73.1	39.6	4.09	0.1047	4.55	0.640	0.365
3RD QUARTILE	•	93.0	46.1	4.26	0.1231	5.60	0.730	0.565
VOL. WGT. MEAN	:	*****	43.5	*****	0.1113	4.93	0.622	0.426

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

1

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.000	10.000	10.000	9.000	9.000	10.000	9.0000
MUNIXAM	:	0.640	1.700	0.325	0.110	0.220	1.110	0.0270
MINIMUM	:	0.060	0.390	0.030	0.005	0.010	0.370	0.0030
RANGE	:	0.580	1.310	0.295	0.105	0.210	0.740	0.0240
ARITH. MEAN	:	0.257	0.857	0.132	0.038	0.062	0.681	0.0097
ARITH. STD. DEV	:	0.177	0.373	0.094	0.032	0.066	0.235	0.0078
GEOM. MEAN	:	0.208	0.792	0.106	0.027	0.039	0.646	0.0075
GEOM. STD. DEV.	:	2.022	1.517	2.062	2.577	2.884	1.412	2.0682
1ST QUARTILE	:	0.120	0.575	0.062	0.015	0.015	0.490	0.0040
2ND QUARTILE	:	0.215	0.835	0.092	0.025	0.040	0.640	0.0065
3RD QUARTILE	:	0.270	0.880	0.172	0.045	0.070	0.745	0.0095
VOL. WGT. MEAN	:	0.213	0.774	0.112	0.035	0.043	0.630	0.0089

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERI	OD OF REPORT	:	DEC 31,80	TO NOV 30,81	髮			PAGE: 3	
			MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
			MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF	SAMPLES	:	10.0000	10.0000	10.000	9.0000	10.0000	10.0000	10.000
MAXI	MUM	:	0.0220	0.0020	0.038	0.1210	0.0170	0.0010	0.504
MINI	MUM	:	0.0020	0.0005	0.004	0.0218	0.0060	0.0010	0.012
RANG	BE .	:	0.0200	0.0015	0.033	0.0992	0.0110	0.0000	0.492
ARIT	H. MEAN		0.0071	0.0008	0.014	0.0524	0.0111	0.0010	0.093
ARIT	H. STD. DEV	:	0.0060	0.0006	0.010	0.0321	0.0034	0.0000	0.150
GEOM	I. MEAN	•	0.0056	0.0007	0.012	0.0449	0.0106	0.0010	0.046
GEOM	1. STD. DEV.	:	2.0172	1.8023	1.907	1.8045	1.3748	1.0000	3.036
1ST	QUARTILE	:	0.0035	0.0005	0.007	0.0245	0.0080	0.0010	0.020
2ND	QUARTILE	:	0.0045	0.0005	0.012	0.0426	0.0110	0.0010	0.035
3RD	QUARTILE	:	0.0075	0.0007	0.015	0.0584	0.0120	0.0010	0.063
VOL.	WGT. MEAN	:	0.0061	0.0007	0.012	0.0472	0.0103	0.0010	0.077

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0.00012

0.0777

#### STATION NAME : BINBROOK/CUMULATIVE PRECIP.

VOL. WGT. MEAN :

PERIOD OF REPORT	: DEC	31,80 TO	NOV 30,81	
		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	9.00000	11.0000
MAXIMUM	:	0.0196	0.00040	0.1202
MINIMUM	:	0.0007	0.00005	0.0214
RANGE	:	0.0189	0.00035	0.0988
ARITH. MEAN	:	0.0050	0.00016	0.0746
ARITH. STD. DEV	:	0.0063	0.00012	0.0317
GEOM. MEAN	:	0.0026	0.00012	0.0669
GEOM. STD. DEV.	:	3.2443	2.30034	1.6993
1ST QUARTILE	•	0.0011	0.00005	0.0418
2ND QUARTILE	:	0.0014	0.00012	0.0711
3RD QUARTILE	:	0.0055	0.00020	0.0959
RANGE ARITH. MEAN ARITH. STD. DEV GEOM. MEAN GEOM. STD. DEV. 1ST QUARTILE 2ND QUARTILE	1 1 1 1	0.0189 0.0050 0.0063 0.0026 3.2443 0.0011	0.00035 0.00016 0.00012 0.00012 2.30034 0.00005 0.00012	0.0988 0.0746 0.0317 0.0669 1.6993 0.0418

0.0041

PAGE : 4

JAN 4,83

25.1

32.9

51.4

39.2

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO

:

:

1ST QUARTILE

2ND QUARTILE

3RD QUARTILE

VOL. WGT. MEAN

PRECIP. CONDUCT. PH TOTAL H+ SULPHATE NITRATE CALCIUM LAB TO PH8.3 AS N MM UNHO/CM MG/L MG/L MG/L MG/L # OF SAMPLES 13.0 11.0 12.00 13.0000 13.00 13.000 13.000 MUMIXAM 131.0 56.0 5.72 0.1692 7.10 1.280 1.480 MUMINIM : 27.0 23.0 3.78 0.0326 2.50 0.350 0.170 RANGE 104.0 33.0 1.94 0.1366 4.60 0.930 1.310 ARITH. MEAN 61.4 38.2 4.44 0.0973 4.70 0.688 0.603 ARITH. STD. DEV : 29.3 13.2 0.63 0.0407 1.49 0.255 0.426 GEOM. MEAN 55.8 36.2 4.40 0.0886 4.47 0.648 0.476 GEOM. STD. DEV. : 1.6 1.4 1.14 1.6017 1.40 1.441 2.066

4.06

4.22

4.64

\*\*\*\*\*

0.0717

0.0818

0.1242

0.1082

3.15

4.85

5.42

4.52

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

38.0

57.0

64.1

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PAGE: 1

0.500

0.640

0.740

0.645

0.265

0.360

0.790

0.490

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# ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MULINOMMA	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	11.000	10.000	12.000	13.000	11.000	13.000	8.0000
MAXIMUM	:	0.460	1.050	0.280	0.190	0.230	1.340	0.0150
MUNINUM	:	0.140	0.180	0.045	0.002	0.005	0.264	0.0005
RANGE	:	0.320	0.870	0.235	0.188	0.225	1.076	0.0145
ARITH. MEAN	:	0.241	0.593	0.130	0.062	0.079	0.645	0.0055
ARITH. STD. DEV	:	0.117	0.235	0.085	0.051	0.069	0.319	0.0061
GEOM. MEAN	:	0.219	0.545	0.106	0.042	0.052	0.577	0.0028
GEOM. STD. DEV.	:	1.568	1.598	1.955	2.939	2.976	1.634	3.9268
1ST QUARTILE	÷	0.145	0.485	0.060	0.025	0.023	0.366	0.0007
2ND QUARTILE	:	0.180	0.525	0.087	0.042	0.057	0.540	0.0035
3RD QUARTILE	:	0.310	0.675	0.192	0.072	0.092	0.765	0.0100
VOL. WGT. MEAN	:	0.230	0.587	0.110	0.049	0.069	0.573	0.0049

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83 PAGE : 3

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	10.0000	11.0000	10.000	10.0000	11.0000	10.0000	10.000
MAXIMUM	:	0.0180	0.0010	0.023	0.1410	0.0130	0.0010	0.118
MINIMUM	:	0.0005	0.0005	0.002	0.0183	0.0050	0.0010	0.016
RANGE	:	0.0175	0.0005	0.021	0.1227	0.0080	0.0000	0.102
ARITH. MEAN	:	0.0058	0.0005	0.010	0.0519	0.0086	0.0010	0.046
ARITH. STD. DEV	:	0.0049	0.0002	0.006	0.0390	0.0028	0.0000	0.038
GEOM. MEAN	:	0.0043	0.0005	0.008	0.0419	0.0083	0.0010	0.036
GEOM. STD. DEV.	:	2.5442	1.2324	1.902	1.9528	1.3722	1.0000	2.081
1ST QUARTILE	:	0.0030	0.0005	0.006	0.0241	0.0065	0.0010	0.018
2ND QUARTILE	:	0.0040	0.0005	0.007	0.0353	0.0070	0.0010	0.029
3RD QUARTILE	•	0.0065	0.0005	0.010	0.0626	0.0105	0.0010	0.051
VOL. WGT. MEAN	:	0.0054	0.0005	0.009	0.0463	0.0080	0.0010	0.041

-7

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT		JAN 5,82	TO JAN	4,83	
		COPPER MG/L	CADI	IIUM S/L	FREE H+
		NG/ L	PIG	7/L	MG/L
# OF SAMPLES	:	11.0000	11.	00000	12.0000
MAXIMUM	:	0.0025	0.	00020	0.1660
MINIMUM	:	0.0008	0.	00005	0.0019
RANGE	:	0.0016	0.	00015	0.1641
ARITH. MEAN	•	0.0013	0.	00009	0.0648
ARITH. STD. DEV	:	0.0006	0.	00006	0.0516
GEOM. MEAN	7	0.0012	0.	00007	0.0367
GEOM. STD. DEV.	:	1.4921	1.	76565	4.2349
1ST QUARTILE	:	0.0008	0.	00005	0.0251
2ND QUARTILE	:	0.0010	0.	00005	0.0597
3RD QUARTILE	:	0.0013	0.	00010	0.0886
VOL. WGT. MEAN	:	0.0012	0.	00007	0.0734

PAGE : 4

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STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+	SULPHATE	NITRATE	CALCIUM
		ММ	UHHO/CM	LAB	TO PH8.3 MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	11.0	11.0	11.00	10.0000	11.00	11.000	11.000
MUMIXAH	•	146.0	51.5	4.34	0.1354	5.40	0.950	0.600
MINIMUM	:	14.0	25.2	3.98	0.0806	1.95	0.300	0.050
RANGE	:	132.0	26.3	0.36	0.0548	3.45	0.650	0.550
ARITH. MEAN	:	63.5	35.7	4.18	0.1038	3.63	0.522	0.249
ARITH. STD. DEV	:	41.4	8.1	0.12	0.0205	1.09	0.197	0.198
GEOM. MEAN	:	51.8	34.9	4.18	0.1020	3.47	0.491	0.183
GEOM. STD. DEV.	:	2.0	1.2	1.03	1.2163	1.38	1.442	2.359
1ST QUARTILE	:	32.5	29.3	4.06	0.0840	2.50	0.325	0.070
2ND QUARTILE	•	41.5	33.2	4.16	0.0972	3.63	0.465	0.170
3RD QUARTILE	:	89.0	40.1	4.28	0.1212	4.30	0.645	0.325
VOL. WGT. MEAN	:	*****	34.1	*****	0.1022	3.48	0.466	0.194

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

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#### -10

# ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	: DEC 31,80	TO	NOV 30,81	PAGE: 2

		CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	PHOSPHOR MG/L
# OF SAMPLES	:	10.000	11.000	11.000	10.000	10.000	11.000	11.0000
MUMIXAM	:	0.390	0.980	0.100	0.100	0.240	0.810	0.0230
MINIMUM	:	0.040	0.190	0.005	0.020	0.020	0.168	0.0030
RANGE	:	0.350	0.790	0.095	0.080	0.220	0.642	0.0200
ARITH. MEAN	:	0.162	0.513	0.054	0.043	0.095	0.410	0.0106
ARITH. STD. DEV	:	0.101	0.207	0.035	0.025	0.070	0.187	0.0071
GEOM. MEAN	:	0.135	0.474	0.038	0.038	0.071	0.372	0.0086
GEOM. STD. DEV.	:	1.923	1.538	2.769	1.710	2.340	1.606	1.9957
1ST QUARTILE	i	0.080	0.335	0.012	0.020	0.030	0.231	0.0050
2ND QUARTILE	:	0.160	0.480	0.050	0.040	0.080	0.370	0.0060
3RD QUARTILE	:	0.190	0.600	0.082	0.050	0.130	0.495	0.0160
VOL. WGT. MEAN	:	0.130	0.473	0.042	0.041	0.070	0.394	0.0121

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERTUD OF REPORT	: DEC 31,80	10	NOV 30,81		848	PAGE :	3	
				7 <b>9</b> 77				

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	8.0000	10.0000	9.000	9.0000	10.0000	10.0000	8.000
MAXIMUM	:	0.0060	0.0080	0.060	0.2620	0.0140	0.0010	0.086
MINIMUM	:	0.0010	0.0005	0.003	0.0204	0.0030	0.0010	0.007
RANGE	:	0.0050	0.0075	0.057	0.2416	0.0110	0.0000	0.080
ARITH. MEAN	•	0.0026	0.0031	0.021	0.1016	0.0076	0.0010	0.034
ARITH. STD. DEV	:	0.0018	0.0024	0.018	0.0796	0.0036	0.0000	0.026
GEOM. MEAN	:	0.0021	0.0023	0.016	0.0742	0.0069	0.0010	0.027
GEOM. STD. DEV.	•	2.0462	2.5117	2.380	2.4395	1.6282	1.0000	2.185
1ST QUARTILE	:	0.0010	0.0012	0.009	0.0304	0.0045	0.0010	0.019
2ND QUARTILE	:	0.0020	0.0025	0.015	0.0774	0.0070	0.0010	0.025
3RD QUARTILE	:	0.0040	0.0035	0.024	0.1241	0.0090	0.0010	0.047
VOL. WGT. MEAN	:	0.0029	0.0034	0.017	0.0785	0.0073	0.0010	0.035

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STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE :	:	4
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		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	LAB MG/L
# OF SAMPLES	:	9.0000	10.00000	11.0000
MAXIMUM	:	0.0112	0.00100	0.1047
MINIMUM	:	0.0018	0.00005	0.0457
RANGE	:	0.0094	0.00095	0.0590
ARITH. MEAN	:	0.0065	0.00037	0.0681
ARITH. STD. DEV	:	0.0029	0.00028	0.0191
GEOM. MEAN	:	0.0058	0.00028	0.0658
GEOM. STD. DEV.	:	1.7520	2.42330	1.3192
1ST QUARTILE	:	0.0040	0.00015	0.0479
2ND QUARTILE	:	0.0062	0.00035	0.0640
3RD QUARTILE	:	0.0077	0.00045	0.0804
VOL. WGT. MEAN	:	0.0059	0.00031	0.0678

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### ONTARIO MINISTRY OF THE ENVIRONHENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 5,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
# OF CAMPLES	125				MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	13.0	13.0	13.00	13.0000	13.00	13.000	13.000
MAXIMUM	•	140.0	60.0	4.49	0.1494	7.60	0.880	0.740
MINIMUM	:	19.0	13.5	3.84	0.0464	1.10	0.140	0.040
RANGE	:	121.0	46.5	0.65	0.1030	6.50	0.740	0.700
ARITH. MEAN	:	56.4	38.2	4.14	0.1032	3.70	0.558	0.243
ARITH. STD. DEV	:	41.9	12.2	0.18	0.0261	1.76	0.212	0.189
GEOM. MEAN	:	44.2	35.8	4.13	0.0997	3.28	0.510	0.188
GEOM. STD. DEV.	:	2.1	1.5	1.04	1.3374	1.71	1.634	2.153
1ST QUARTILE	•	22.9	35.5	4.06	0.0949	2.38	0.445	0.100
2ND QUARTILE	•	33.5	37.6	4.09	0.0999	3.50	0.490	0.185
3RD QUARTILE	:	68.5	41.8	4.19	0.1122	4.22	0.695	0.255
VOL. WGT. MEAN	•	*****	35.7	****	0.0981	3.35	0.538	0.197

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 5,83				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	12.000	12.000	13.000	12.000	12.000	13.000	12.0000
MAXIMUM	:	0.740	1.020	0.145	0.080	0.385	0.910	0.0180
MINIMUM	:	0.020	0.160	0.005	0.002	0.005	0.138	0.0005
RANGE	:	0.720	0.860	0.140	0.077	0.380	0.772	0.0175
ARITH. MEAN	:	0.232	0.456	0.045	0.039	0.120	0.451	0.0077
ARITH. STD. DEV	:	0.208	0.238	0.039	0.024	0.129	0.239	0.0053
GEOM. MEAN	:	0.157	0.405	0.031	0.028	0.063	0.393	0.0054
GEOM. STD. DEV.	:	2.720	1.666	2.793	2.874	3.725	1.758	2.9056
1ST QUARTILE	:	0.105	0.285	0.017	0.022	0.025	0.257	0.0045
2ND QUARTILE	:	0.150	0.430	0.037	0.040	0.065	0.392	0.0070
3RD QUARTILE	:	0.335	0.515	0.045	0.057	0.202	0.535	0.0105
VOL. WGT. MEAN	:	0.207	0.400	0.032	0.029	0.105	0.399	0.0071

STATION NAME : BURWASH/CUMULATIVE PRECIP.

VOL. WGT. MEAN :

0.0024

0.0009

PERIOD OF REPORT	•	JAN 5,82	TO JAN 5,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	13.0000	13.0000	13.000	13.0000	13.0000	12.0000	13.000
MAXIMUM	:	0.0070	0.0080	0.035	0.2070	0.0130	0.0020	0.134
MINIMUM	•	0.0010	0.0005	0.001	0.0070	0.0050	0.0010	0.003
RANGE	:	0.0060	0.0075	0.034	0.2000	0.0080	0.0010	0.131
ARITH. MEAN	•	0.0030	0.0013	0.012	0.0689	0.0091	0.0011	0.049
ARITH. STD. DEV	:	0.0019	0.0021	0.011	0.0522	0.0028	0.0003	0.040
GEOM. MEAN	:	0.0025	0.0008	0.009	0.0515	0.0087	0.0011	0.031
GEOM. STD. DEV.	:	1.9201	2.2862	2.516	2.3991	1.3950	1.2215	3.294
1ST QUARTILE	:	0.0015	0.0005	0.006	0.0339	0.0065	0.0010	0.013
2ND QUARTILE	:	0.0025	0.0005	0.007	0.0551	0.0090	0.0010	0.045
3RD QUARTILE	:	0.0030	0.0007	0.012	0.0804	0.0110	0.0010	0.056

0.009

0.0464

0.0085

0.0010

0.036

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# ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 5,83	PAGE	:
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		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES	:	13.0000	13.00000	13.0000
MUNIXAM	2	0.0098	0.00040	0.1445
MINIMUM	:	0.0008	0.00005	0.0324
RANGE	:	0.0090	0.00035	0.1122
ARITH. MEAN	:	0.0034	0.00013	0.0787
ARITH. STD. DEV	:	0.0030	0.00010	0.0306
GEOM. MEAN	:	0.0025	0.00011	0.0731
GEOM. STD. DEV.	:	2.2210	2.05302	1.5090
1ST QUARTILE	:	0.0013	0.00005	0.0576
2ND QUARTILE	:	0.0019	0.00010	0.0786
3RD QUARTILE	:	0.0033	0.00020	0.0851
VOL. WGT. MEAN	:	0.0022	0.00015	0.0753

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PAGE: 1

1.315

0.525

0.690

0.775

0.664

1.777

0.190

0.305

0.385

0.312

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81

		PRECIP.	CONDUCT.	PH Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	UHHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	11.0	10.0	11.00	10.0000	10.00	10.000	10.000
MAXIMUM		108.0	70.5	4.45	0.1628	8.55	1.140	1.120
MINIMUM	:	23.0	29.3	3.88	0.0778	3.15	0.480	0.150
RANGE	•	85.0	41.2	0.57	0.0850	5.40	0.660	0.970
ARITH. MEAN		66.3	43.8	4.18	0.1105	5.23	0.698	0.367
ARITH. STD. DEV	:	28.9	. 13.7	0.17	0.0291	1.74	0.202	0.281
GEOM. MEAN	:	59.7	42.1	4.18	0.1073	5.00	0.674	0.308

1.04

4.02

4.18

4.27

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1.2875

0.0851

0.1002

0.1226

0.1119

1.37

3.88

4.65

5.88

5.19

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

•

1.7

35.6

60.8

86.6

1.3

32.3

39.9

46.8

43.7

GEOM. STD. DEV. :

VOL. WGT. MEAN :

1ST QUARTILE

2ND QUARTILE

3RD QUARTILE

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31,80	то	NOV 30,81				PAGE: 2	
		CHLORIDE		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.000		10.000	10.000	10.000	10.000	10.000	10.0000
MAXIMUM	:	0.520		1.680	0.310	0.080	0.230	1.320	0.0280
MINIMUM	:	0.040		0.610	0.030	0.010	0.010	0.490	0.0050
RANGE	:	0.480		1.070	0.280	0.070	0.220	0.830	0.0230
ARITH. MEAN	:	0.219		1.077	0.091	0.038	0.071	0.909	0.0151
ARITH. STD. DEV	:	0.127		0.335	0.083	0.023	0.067	0.266	0.0072
GEOM. MEAN	:	0.186		1.032	0.071	0.031	0.048	0.873	0.0134
GEOM. STD. DEV.	:	1.933		1.364	1.994	2.012	2.639	1.358	1.6997
1ST QUARTILE	:	0.150		0.810	0.042	0.020	0.020	0.690	0.0090
2ND QUARTILE	:	0.205		1.060	0.062	0.030	0.045	0.900	0.0140
3RD QUARTILE	:	0.225		1.185	0.092	0.050	0.095	1.025	0.0200
VOL. WGT. MEAN	:	0.192		1.006	0.077	0.036	0.060	0.866	0.0145

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 3

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	10.0000	10.000	10.0000	10.0000	10.0000	10.000
MUMIXAM	:	0.0050	0.0020	0.025	0.2500	0.0140	0.0010	0.156
MINIMUM	•	0.0010	0.0005	0.004	0.0158	0.0060	0.0010	0.008
RANGE	:	0.0040	0.0015	0.020	0.2342	0.0080	0.0000	0.148
ARITH. MEAN	•	0.0031	0.0007	0.010	0.0745	0.0088	0.0010	0.056
ARITH. STD. DEV	ŧ	0.0014	0.0005	0.006	0.0748	0.0027	0.0000	0.051
GEOM. MEAN	:	0.0028	0.0006	0.009	0.0495	0.0085	0.0010	0.038
GEOM. STD. DEV.		1.6644	1.5965	1.568	2.5630	1.3403	1.0000	2.610
1ST QUARTILE	•	0.0020	0.0005	0.007	0.0196	0.0060	0.0010	0.015
2ND QUARTILE		0.0030	0.0005	0.009	0.0398	0.0085	0.0010	0.041
3RD QUARTILE		0.0040	0.0005	0.010	0.0938	0.0095	0.0010	0.061
VOL. WGT. MEAN	:	0.0031	0.0006	0.009	0.0760	0.0081	0.0010	0.054

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# ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	: DEC 31,80	TO	NOV 30,81	PAGE : 4
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		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	9.00000	11.0000
MAXIMUM	:	0.0257	0.00040	0.1318
MINIMUM	:	0.0012	0.00005	0.0355
RANGE	:	0.0245	0.00035	0.0963
ARITH. MEAN	:	0.0063	0.00017	0.0710
ARITH. STD. DEV	:	0.0079	0.00015	0.0286
GEOM. MEAN	:	0.0037	0.00012	0.0663
GEOM. STD. DEV.	:	2.8688	2.46521	1.4672
1ST QUARTILE	•	0.0014	0.00005	0.0481
2ND QUARTILE	:	0.0026	0.00008	0.0625
3RD QUARTILE	:	0.0062	0.00020	0.0804
VOL. WGT. MEAN	:	0.0063	0.00014	0.0738

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		мм	UIHO/CH		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	13.0	13.0	10.00	13.0000	13.00	13.000	12.000
MAXIMUM	•	119.0	75.5	4.53	0.1848	9.35	1.700	1.320
MINIMUM	:	22.5	20.2	3.74	0.0242	2.85	0.080	0.140
RANGE	•	96.5	55.3	0.79	0.1606	6.50	1.620	1.180
ARITH. MEAN	:	65.8	45.4	4.08	0.0995	5.60	0.785	0.577
ARITH. STD. DEV	:	30.3	17.3	0.25	0.0465	2.33	0.434	0.388
GEOM. MEAN	•	58.9	42.1	4.07	0.0880	5.16	0.644	0.458
GEOM. STD. DEV.	:	1.7	1.5	1.06	1.7427	1.54	2.148	2.093
1ST QUARTILE	:	37.5	29.9	3.84	0.0632	3.15	0.460	0.230
2ND QUARTILE	:	64.5	46.8	4.05	0.0813	5.13	0.700	0.520
3RD QUARTILE	:	78.9	51.9	4.23	0.1284	6.72	1.005	0.855
VOL. WGT. MEAN	:	*****	43.8	*****	0.1019	5.10	0.643	0.459

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

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# ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	12.000	12.000	12.000	13.000	11.000	13.000	12,0000
MUMIXAM	:	0.880	1.750	0.445	0.170	0.160	2.200	0.0800
MINIMUM	:	0.140	0.500	0.045	0.002	0.020	0.450	0.0050
RANGE	:	0.740	1.250	0.400	0.168	0.140	1.750	0.0750
ARITH. MEAN	:	0.297	1.037	0.155	0.063	0.066	0.930	0.0225
ARITH. STD. DEV		0.197	0.358	0.134	0.050	0.050	0.470	0.0225
GEOM. MEAN	:	0.260	0.980	0.116	0.041	0.050	0.847	0.0152
GEOM. STD. DEV.	:	1.635	1.434	2.177	3.221	2.252	1.541	2.4771
1ST QUARTILE	:	0.190	0.750	0.065	0.023	0.020	0.610	0.0065
2ND QUARTILE	:	0.260	1.100	0.097	0.052	0.045	0.800	0.0140
3RD QUARTILE	:	0.325	1.280	0.200	0.075	0.092	0.980	0.0280
VOL. WGT. MEAN	:	0.262	0.933	0.115	0.055	0.065	0.804	0.0236

#### STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	13.0000	13.0000	12.000	13.0000	13.0000	13.0000	12.000
MAXIMUM	:	0.0170	0.0020	0.023	0.3900	0.0180	0.0010	0.158
MUNIMUM	:	0.0005	0.0005	0.004	0.0204	0.0005	0.0010	0.015
RANGE	:	0.0165	0.0015	0.018	0.3696	0.0175	0.0000	0.143
ARITH. MEAN	:	0.0067	0.0008	0.010	0.0856	0.0076	0.0010	0.055
ARITH. STD. DEV	:	0.0057	0.0006	0.006	0.1017	0.0058	0.0000	0.049
GEOM. MEAN	:	0.0045	0.0007	0.009	0.0552	0.0053	0.0010	0.040
GEOM. STD. DEV.	•	2.7802	1.7127	1.736	2.4734	2.7074	1.0000	2.245
1ST QUARTILE	ŧ	0.0020	0.0005	0.006	0.0259	0.0030	0.0010	0.019
2ND QUARTILE	:	0.0045	0.0005	0.008	0.0415	0.0055	0.0010	0.033
3RD QUARTILE	:	0.0090	0.0007	0.013	0.0877	0.0095	0.0010	0.080
VOL. WGT. MEAN	:	0.0052	0.0007	0.008	0.0641	0.0073	0.0010	0.045

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83	AGE	:	4	
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		COPPER MG/L	CADMIUM MG/L	FREE H+ LAB MG/L		
# OF SAMPLES	:	13.0000	13.00000	10.0000		
MUMIXAM	:	0.0056	0.00040	0.1820		
MINIMUM	•	0.0007	0.00005	0.0295		
RANGE	*	0.0048	0.00035	0.1525		
ARITH. MEAN	:	0.0017	0.00012	0.0961		
ARITH. STD. DEV	:	0.0015	0.00010	0.0509		
GEOM. MEAN	:	0.0013	0.00009	0.0834		
GEOM. STD. DEV.	:	1.9695	1.93734	1.7969		
1ST QUARTILE	:	0.0008	0.00005	0.0510		
2ND QUARTILE	:	0.0009	0.00010	0.0897		
3RD QUARTILE	:	0.0015	0.00010	0.1231		
VOL. WGT. MEAN	:	0.0013	0.00010	0.0967		

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	r :	DEC 31,80	TO NOV 30,81				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		HM	UMHO/CH	F556 To.	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	11.0	9.0	10.00	9.0000	8.00	9.000	8.000
MAXIMUM	•	156.0	88.5	4.42	0.2080	10.30	1.330	1.250
MINIMUM	:	12.4	32.6	3.74	0.0784	3.95	0.680	0.330
RANGE	•	143.6	55.9	0.68	0.1296	6.35	0.650	0.920
ARITH. MEAN	:	75.6	54.4	4.11	0.1302	6.29	0.869	0.709
ARITH. STD. DEV	ř	49.1	20.8	0.20	0.0425	2.53	0.221	0.272
GEOM. MEAN	:	59.5	51.1	4.11	0.1244	5.90	0.847	0.664
GEOM. STD. DEV.	:	2.2	1.4	1.05	1.3721	1.46	1.264	1.478
1ST QUARTILE	į	27.5	35.8	3.95	0.0992	4.32	0.690	0.555
2ND QUARTILE	:	62.5	46.2	4.12	0.1128	5.40	0.765	0.700
3RD QUARTILE	•	106.3	62.8	4.23	0.1427	8.32	0.905	0.790
VOL. WGT. MEAN		*****	51.1	*****	0.1222	6.19	0.830	0.701

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 2

		CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	PHOSPHOR MG/L
# OF SAMPLES	:	9.000	8.000	9.000	11.000	9.000	9.000	9.0000
MAXIMUM	:	0.870	1.600	0.395	0.180	0.210	1.970	0.0820
MINIMUM	•	0.150	0.810	0.070	0.005	0.020	0.590	0.0100
RANGE	:	0.720	0.790	0.325	0.175	0.190	1.380	0.0720
ARITH. MEAN	:	0.368	1.188	0.148	0.090	0.083	1.026	0.0441
ARITH. STD. DEV	ŧ	0.226	0.232	0.103	0.057	0.062	0.403	0.0274
GEOM. MEAN	:	0.321	1.167	0.127	0.065	0.065	0.967	0.0357
GEOM. STD. DEV.	:	1.705	1.221	1.731	2.810	2.149	1.423	2.0861
1ST QUARTILE	:	0.225	1.070	0.085	0.035	0.035	0.770	0.0195
2ND QUARTILE	•	0.280	1.175	0.110	0.080	0.055	0.945	0.0335
3RD QUARTILE	:	0.350	1.300	0.130	0.130	0.100	1.020	0.0600
VOL. WGT. MEAN	:	0.306	1.252	0.131	0.084	0.078	1.006	0.0462

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 3

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	9.0000	9.0000	9.000	9.0000	9.0000	9.0000	9.000
MAXIMUM	:	0.0220	0.0010	0.023	0.2210	0.0160	0.0010	0.202
MINIMUM	•	0.0050	0.0005	0.008	0.0487	0.0050	0.0010	0.033
RANGE	:	0.0170	0.0005	0.015	0.1723	0.0110	0.0000	0.169
ARITH. MEAN	•	0.0096	0.0007	0.014	0.1179	0.0110	0.0010	0.102
ARITH. STD. DEV	:	0.0053	0.0003	0.005	0.0679	0.0037	0.0000	0.067
GEOM. MEAN	:	0.0086	0.0006	0.013	0.1010	0.0103	0.0010	0.083
GEOM. STD. DEV.	:	1.6071	1.4142	1.436	1.8148	1.4864	1.0000	2.041
1ST QUARTILE	:	0.0055	0.0005	0.009	0.0580	0.0075	0.0010	0.042
2ND QUARTILE	:	0.0080	0.0005	0.012	0.0798	0.0115	0.0010	0.068
3RD QUARTILE	:	0.0100	0.0007	0.016	0.1565	0.0130	0.0010	0.137
VOL. WGT. MEAN	:	0.0088	0.0007	0.012	0.1147	0.0097	0.0010	0.101

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STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE	PERIOD OF	DV 30,81 PAGE	31	: 4
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		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	MG/L
# OF SAMPLES	:	8.0000	8.00000	10.0000
MUNIXAM	:	0.0096	0.00070	0.1820
MINIMUM	:	0.0014	0.00005	0.0380
RANGE	:	0.0082	0.00065	0.1440
ARITH. MEAN	:	0.0041	0.00022	0.0853
ARITH. STD. DEV	:	0.0035	0.00022	0.0427
GEOM. MEAN	:	0.0031	0.00015	0.0773
GEOM. STD. DEV.	:	2.1839	2.66345	1.5851
1ST QUARTILE	:	0.0016	0.00005	0.0519
2ND QUARTILE	:	0.0026	0.00020	0.0759
3RD QUARTILE	:	0.0068	0.00025	0.0914
VOL. WGT. MEAN	:	0.0038	0.00017	0.0802

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83		*		PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	CALCIUM MG/L
# OF SAMPLES	:	12.0	12.0	12.00	12.0000	12.00	12.000	12.000
MUMIXAM	:	141.0	102.0	4.43	0.2120	10.00	1.490	1.100
MINIMUM	:	19.0	22.5	3.72	0.0720	2.20	0.320	0.130
RANGE	:	122.0	79.5	0.71	0.1400	7.80	1.170	0.970
ARITH. MEAN	:	81.4	49.4	4.06	0.1276	5.06	0.733	0.483
ARITH. STD. DEV	:	33.7	25.6	0.25	0.0513	2.69	0.348	0.311
GEOM. MEAN	:	73.1	43.8	4.06	0.1186	4.46	0.662	0.396
GEOM. STD. DEV.	:	1.7	1.7	1.06	1.4890	1.69	1.615	1.969
1ST QUARTILE	:	57.0	27.1	3.85	0.0867	2.77	0.475	0.230
2ND QUARTILE	•	81.5	42.1	4.05	0.1104	4.38	0.700	0.405
3RD QUARTILE	:	103.7	68.5	4.27	0.1792	7.13	0.890	0.690
VOL. WGT. MEAN	:	*****	46.3	*****	0.1203	4.71	0.666	0.407

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPOR	Τ :	JAN 5,82	TO JAN 4,83				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	12.000	12.000	12.000	12.000	12.000	12.000	11.0000
MAXIMUM	:	0.410	1.750	0.185	0.220	0.195	1.140	0.0710
MINIMUM	:	0.140	0.270	0.020	0.002	0.025	0.156	0.0010
RANGE	:	0.270	1.480	0.165	0.218	0.170	0.984	0.0700
ARITH. MEAN	:	0.257	0.695	0.088	0.069	0.079	0.504	0.0184
ARITH. STD. DEV	:	0.087	0.424	0.053	0.072	0.055	0.305	0.0255
GEOM. MEAN	:	0.243	0.590	0.072	0.041	0.063	0.420	0.0081
GEOM. STD. DEV.	:	1.417	1.826	2.003	3.357	2.054	1.917	3.9549
1ST QUARTILE	:	0.185	0.305	0.045	0.022	0.032	0.226	0.0022
2ND QUARTILE	:	0.250	0.710	0.075	0.042	0.065	0.535	0.0075
3RD QUARTILE	:	0.325	0.870	0.123	0.082	0.120	0.650	0.0135
VOL. WGT. MEAN	:	0.240	0.653	0.077	0.073	0.066	0.478	0.0193

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUHINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	12.0000	12.0000	12.000	12.0000	12.0000	12.0000	11.000
MAXIMUM	:	0.0240	0.0020	0.027	0.4160	0.0140	0.0020	0.132
MINIMUM	:	0.0005	0.0005	0.003	0.0085	0.0040	0.0010	0.004
RANGE	:	0.0235	0.0015	0.024	0.4075	0.0100	0.0010	0.128
ARITH. MEAN	•	0.0079	0.0006	0.010	0.0846	0.0072	0.0011	0.043
ARITH. STD. DEV	:	0.0078	0.0004	0.007	0.1112	0.0033	0.0003	0.035
GEOM. MEAN	1	0.0049	0.0006	0.008	0.0507	0.0065	0.0011	0.031
GEOM. STD. DEV.	:	3.0253	1.4921	2.000	2.7686	1.5593	1.2215	2.575
1ST QUARTILE	•	0.0020	0.0005	0.005	0.0315	0.0045	0.0010	0.016
2ND QUARTILE	•	0.0065	0.0005	0.008	0.0450	0.0055	0.0010	0.035
3RD QUARTILE	:	0.0085	0.0005	0.012	0.0845	0.0100	0.0010	0.056
VOL. WGT. MEAN	:	0.0064	0.0006	0.008	0.0670	0.0067	0.0011	0.036

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STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF	REPORT	*	JAN	5,82	TO	JAN	4,83	

		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	MG/L
# OF SAMPLES	:	12.0000	12.00000	12.0000
MAXIMUM	:	0.0081	0.00090	0.1905
MINIMUM	:	0.0007	0.00005	0.0372
RANGE	:	0.0074	0.00085	0.1534
ARITH. MEAN	:	0.0029	0.00020	0.1002
ARITH. STD. DEV	:	0.0024	0.00025	0.0554
GEOM. MEAN	;	0.0022	0.00012	0.0866
GEOM. STD. DEV.	;	2.1112	2.61829	1.7708
1ST QUARTILE	*	0.0013	0.00005	0.0543
2ND QUARTILE	:	0.0021	0.00010	0.0883
3RD QUARTILE	:	0.0034	0.00020	0.1426
VOL. WGT. MEAN	:	0.0025	0.00020	0.0958

PAGE: 4

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

PAGE : 1

0.680

0.925

0.759

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1.138

28.8

41.3

39.6

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT : JUN 1,81 TO NOV 30,81

		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		нн	UMHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	6.0	5.0	5.00	4.0000	6.00	6.000	3.000
MAXIMUM	:	165.0	58.0	4.89	0.1022	11.70	1.330	2.070
MINIMUM	:	33.0	23.5	4.20	0.0520	3.35	0.360	0.580
RANGE	:	132.0	34.5	0.69	0.0502	8.35	0.970	1.490
ARITH. MEAN	•	91.3	38.1	4.42	0.0741	6.90	0.772	1.080
ARITH. STD. DEV	:	45.1	15.6	0.28	0.0230	3.49	0.380	0.857
GEOM. MEAN	•	81.4	35.7	4.41	0.0715	6.17	0.696	0.891
GEOM. STD. DEV.	:	1.7	1.5	1.06	1.3639	1.69	1.653	2.074
1ST QUARTILE	:	46.5	24.9	4.23	0.0555	3.52	0.410	******

4.28

4.36

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0.0711

0.0927

0.0817

6.18

8.77

6.97

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

91.0

102.5

2ND QUARTILE

3RD QUARTILE

VOL. WGT. MEAN

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT : JUN 1,81 TO NOV 30,81 PAGE :	:	2
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		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	6.000	5.000	5.000	5.000	5.000	5.000	5.0000
MAXIMUM	:	0.560	1.620	0.685	0.110	0.150	1.190	0.0550
MINIMUM	:	0.140	0.500	0.085	0.020	0.030	0.390	0.0150
RANGE	:	0.420	1.120	0.600	0.090	0.120	0.800	0.0400
ARITH. MEAN	:	0.337	0.988	0.330	0.064	0.096	0.724	0.0330
ARITH. STD. DEV	:	0.197	0.497	0.256	0.036	0.055	0.346	0.0205
GEOM. MEAN	:	0.284	0.890	0.238	0.054	0.080	0.660	0.0279
GEOM. STD. DEV.	:	1.935	1.673	2.647	1.976	2.036	1.615	1.9205
1ST QUARTILE	:	0.140	0.550	0.085	0.030	0.040	0.425	0.0150
2ND QUARTILE	:	0.340	0.710	0.210	6.050	0.075	0.530	0.0200
3RD QUARTILE	:	0.490	1.110	0.397	0.075	0.125	0.790	0.0400
VOL. WGT. MEAN	:	0.292	1.010	0.306	0.065	0.084	0.744	0.0334

#### STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JUN 1,81	TO NOV 30,81				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	5.0000	6.0000	5.000	6.0000	6.0000	6.0000	6.000
MUHIXAM	:	0.0230	0.0050	0.058	0.5450	0.0340	0.0160	0.394
MINIMUM	:	0.0040	0.0005	0.010	0.0504	0.0070	0.0010	0.024
RANGE	:	0.0190	0.0045	0.048	0.4946	0.0270	0.0150	0.370
ARITH. MEAN	:	0.0114	0.0023	0.029	0.1865	0.0190	0.0047	0.138
ARITH. STD. DEV	:	0.0076	0.0018	0.018	0.2054	0.0110	0.0058	0.156
GEOM. MEAN	•	0.0095	0.0016	0.024	0.1159	0.0164	0.0028	0.080
GEOM. STD. DEV.	:	1.9782	2.7015	1.904	2.7951	1.8365	2.8848	3.098
1ST QUARTILE	:	0.0055	0.0005	0.014	0.0507	0.0090	0.0010	0.034
2ND QUARTILE	:	0.0075	0.0020	0.022	0.0728	0.0155	0.0025	0.048
3RD QUARTILE	:	0.0115	0.0030	0.029	0.2019	0.0240	0.0040	0.159
VOL. WGT. MEAN	:	0.0117	0.0025	0.028	0.1854	0.0190	0.0051	0.136

35

0.00065

0.00041

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

3RD QUARTILE

VOL. WGT. MEAN :

PERIOD OF REPORT	: JUN 1,81 TO	NOV 30,81		PAGE : 4
	COPPER	CADMIUM	REE H+	

0.0525

0.0485

		MG/L	MG/L	MG/L
# OF SAMPLES	:	5.0000	6.00000	5.0000
MAXIMUM	:	0.0599	0.00080	0.0631
MUNINUM	:	0.0041	0.00005	0.0129
RANGE	:	0.0558	0.00075	0.0502
ARITH. MEAN	:	0.0187	0.00045	0.0436
ARITH. STD. DEV	:	0.0232	0.00033	0.0196
GEOM. MEAN	:	0.0119	0.00027	0.0384
GEOM. STD. DEV.	:	2.6670	3.76597	1.8971
1ST QUARTILE	•	0.0067	0.00005	0.0250
2ND QUARTILE	:	0.0093	0.00055	0.0436

0.0101

0.0206

-36-

PAGE: 1

0.919

1.817

0.455

1.080

1.240

0.902

1.367

1.216

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1.425

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

JAN 4.83

47.8

1.6

39.9

51.6

60.4

46.5

PERIOD OF REPORT : DEC 31,81 TO

GEOM. MEAN

1ST QUARTILE

2ND QUARTILE

3RD QUARTILE

GEOM. STD. DEV. :

VOL. WGT. MEAN :

		PRECIP.	CONDUCT.	PH Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE	CALCIUM
		ММ	инно/см	LAD	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	•	13.0	8.0	4.00	10.0000	10.00	10.000	2.000
MAXIMUM	:	107.0	92.5	5.27	0.0878	13.80	2.060	1.570
MINIHUM	•	20.2	19.5	4.24	0.0266	4.10	0.410	1.190
RANGE	•	86.8	73.0	1.03	0.0612	9.70	1.650	0.380
ARITH. MEAN	:	50.8	52.0	4.77	0.0475	8.68	1.069	1.380
ARITH. STD. DEV	•	23.5	21.4	0.54	0.0231	3.19	0.594	0.269

4.74

1.12

4.30

4.78

5.23

0.0428

1.6094

0.0269

0.0377

0.0648

0.0503

8.11

1.50

5.77

8.10

11.00

8.39

\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

46.0

1.6

32.5

46.5

61.0

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,81	TO JAN 4,83				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	*	6.000	8.000	7.000	10.000	7.000	9.000	8.0000
MAXIHUM	:	0.900	2.100	0.900	0.425	0.515	1.240	0.1480
MINIMUM	:	0.260	0.210	0.290	0.045	0.125	0.450	0.0060
RANGE	:	0.640	1.890	0.610	0.380	0.390	0.790	0.1420
ARITH. MEAN	:	0.557	1.091	0.639	0.167	0.309	0.782	0.0379
ARITH. STD. DEV	:	0.225	0.628	0.257	0.144	0.173	0.261	0.0465
GEOM. MEAN	:	0.516	0.896	0.588	0.123	0.267	0.744	0.0237
GEOM. STD. DEV.	:	1.552	2.105	1.585	2.263	1.817	1.407	2.6565
1ST QUARTILE	:	0.320	0.635	0.322	0.052	0.137	0.565	0.0135
2ND QUARTILE	:	0.560	1.005	0.587	0.113	0.210	0.690	0.0220
3RD QUARTILE	:	0.630	1.570	0.875	0.183	0.477	0.905	0.0390
VOL. WGT. MEAN	ž	0.514	0.985	0.585	0.142	0.323	0.768	0.0327

0.0007

#### STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP. PERIOD OF REPORT : DEC 31,81 TO JAN 4,83

0.0092

0.0106

ARITH. STD. DEV :

VOL. WGT. MEAN :

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	10.0000	10.0000	10.000	10.0000	10.0000	10.0000	10.000
MUMIXAM	:	0.0310	0.0030	0.081	0.6630	0.0470	0.0100	0.679
MUMINIM		0.0040	0.0005	0.009	0.0602	0.0040	0.0010	0.040
RANGE	:	0.0270	0.0025	0.072	0.6028	0.0430	0.0090	0.639
ARITH. MEAN	:	0.0130	0.0011	0.039	0.2310	0.0164	0.0042	0.183

0.021 0.1768 0.0127 0.0030 0.185 GEOM. MEAN 0.0103 0.0010 0.033 0.1839 0.0126 0.0032 0.132 GEOM. STD. DEV. : 2.1129 1.6321 1.925 2.0280 2.1993 2.2524 2.247 1ST QUARTILE 0.0040 0.0007 0.020 0.1051 0.0050 0.0015 0.066 2ND QUARTILE : 0.0115 0.0010 0.036 0.1840 0.0155 0.0035 0.137 3RD QUARTILE 0.0145

0.0010 0.051 0.2670 0.0190 0.0055 0.194 0.0010 0.034 0.1840 0.0161 0.0036 0.136

PAGE: 3

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GERMAIN PARK	/CUMULATIVE	PRECIP.
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PERIOD OF REPORT	: DEC 31,81 TO	JAN 4,83		PAGE: 4
	COPPER	CADMIUM	FREE H+	

		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES		10.0000	10.00000	4.0000
MUMIXAM	:	0.0355	0.00050	0.0575
MINIMUM	:	0.0022	0.00005	0.0054
RANGE	:	0.0333	0.00045	0.0522
ARITH. MEAN	:	0.0142	0.00026	0.0280
ARITH. STD. DEV	:	0.0101	0.00016	0.0262
GEOM. MEAN	:	0.0107	0.00020	0.0171
GEOM. STD. DEV.	:	2.3831	2.35722	3.4488
1ST QUARTILE	:	0.0046	0.00008	0.0059
2ND QUARTILE	:	0.0145	0.00030	0.0246
3RD QUARTILE	:	0.0193	0.00035	0.0501
VOL. WGT. MEAN	:	0.0125	0.00025	0.0337

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 1

		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	UHHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	11.0	9.0	11.00	9.0000	10.00	9.000	8.000
MUNIXAM	:	138.0	80.0	4.31	0.1994	12.60	0.890	0.820
MINIMUM	:.	7.0	25.0	3.87	0.0868	2.25	0.220	0.080
RANGE	:	131.0	55.0	0.44	0.1126	10.35	0.670	0.740
ARITH. MEAN	:	54.8	47.2	4.12	0.1255	5.63	0.560	0.322
ARITH. STD. DEV	:	42.4	17.1	0.16	0.0378	2.82	0.241	0.252
GEOM. MEAN	:	39.1	44.5	4.11	0.1207	5.12	0.509	0.246
GEOM. STD. DEV.	:	2.5	1.4	1.04	1.3397	1.58	1.626	2.225
1ST QUARTILE	:	18.5	31.7	3.96	0.0897	3.90	0.325	0.130
2ND QUARTILE	:	32.3	43.8	4.06	0.1156	4.97	0.525	0.240
3RD QUARTILE	:	86.5	55.5	4.27	0.1408	6.13	0.695	0.470
VOL. WGT. MEAN		*****	40.9	*****	0.1144	4.84	0.443	0.271

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	5.000	9.000	8.000	7.000	6.000	10.000	7.0000
MAXIMUM	:	0.140	1.350	0.145	0.090	0.190	1.070	0.0160
MINIMUM	ï	0.050	0.010	0.005	0.020	0.020	0.210	0.0060
RANGE	:	0.090	1.340	0.140	0.070	0.170	0.860	0.0100
ARITH. MEAN	:	0.098	0.684	0.061	0.046	0.072	0.557	0.0087
ARITH. STD. DEV	:	0.040	0.460	0.047	0.022	0.063	0.273	0.0035
GEOM. MEAN	:	0.091	0.416	0.041	0.042	0.053	0.503	0.0082
GEOM. STD. DEV.	:	1.548	4.533	3.027	1.595	2.386	1.611	1.4208
1ST QUARTILE		0.065	0.325	0.025	0.025	0.020	0.373	0.0060
2ND QUARTILE	:	0.080	0.540	0.055	0.040	0.060	0.510	0.0070
3RD QUARTILE	:	0.110	0.895	0.090	0.050	0.075	0.550	0.0095
VOL. WGT. MEAN	:	0.098	0.550	0.052	0.046	0.058	0.458	0.0098

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT	: DE	EC 31,80	TO NOV 30,81				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	6.0000	5.0000	5.000	6.0000	6.0000	6.0000	6.000
MAXIMUM	•	0.0090	0.0210	0.028	0.2890	0.0320	0.0010	0.182
MINIMUM	:	0.0020	0.0005	0.007	0.0248	0.0010	0.0010	0.003
RANGE	:	0.0070	0.0205	0.020	0.2642	0.0310	0.0000	0.179
ARITH. MEAN	:	0.0057	0.0067	0.014	0.1114	0.0103	0.0010	0.069
ARITH. STD. DEV	:	0.0031	0.0082	0.008	0.0971	0.0112	0.0000	0.069
GEOM. MEAN	•	0.0048	0.0036	0.013	0.0807	0.0063	0.0010	0.035
GEOM. STD. DEV.	:	2.0140	3.8108	1.689	2.4738	3.1723	1.0000	4.556
1ST QUARTILE	:	0.0020	0.0017	0.008	0.0296	0.0025	0.0010	0.008
2ND QUARTILE	ŧ	0.0065	0.0035	0.010	0.0881	0.0065	0.0010	0.057
3RD QUARTILE	:	0.0080	0.0045	0.014	0.1192	0.0095	0.0010	0.096
VOL. WGT. MEAN	:	0.0053	0.0068	0.014	0.1034	0.0079	0.0010	0.069

STATION NAME : HANMER/CUMULATIVE PRECIP.

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		20.00		
		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	LAB MG/L
# OF SAMPLES	:	5.0000	5.00000	11.0000
MUMIXAM	:	0.0310	0.00080	0.1349
MINIMUM	:	0.0047	0.00020	0.0490
RANGE	:	0.0263	0.00060	0.0859
ARITH. MEAN	:	0.0126	0.00042	0.0814
ARITH. STD. DEV	:	0.0108	0.00023	0.0299
GEOM. MEAN	:	0.0098	0.00038	0.0765
GEOM. STD. DEV.	:	2.1094	1.65986	1.4455
1ST QUARTILE	:	0.0056	0.00025	0.0525
2ND QUARTILE	:	0.0069	0.00035	0.0692
3RD QUARTILE	:	0.0103	0.00040	0.1023
VOL. WGT. MEAN	:	0.0123	0.00047	0.0768

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+	SULPHATE	NITRATE AS N	CALCIUM
		нн	UMHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	13.0	11.0	12.00	10.0000	12.00	12.000	11.000
MAXIMUM	:	112.0	70.0	5.51	0.1176	14.10	1.200	0.470
MINIMUM	•	16.0	8.0	3.90	0.0326	1.30	0.190	0.050
RANGE	:	96.0	62.0	1.61	0.0850	12.80	1.010	0.420
ARITH. MEAN	:	49.1	35.8	4.31	0.0844	4.43	0.561	0.219
ARITH. STD. DEV	:	30.2	16.5	0.49	0.0267	3.26	0.277	0.152
GEOM. MEAN	:	41.9	31.3	4.29	0.0796	3.73	0.499	0.171
GEOM. STD. DEV.	•	1.8	1.8	1.11	1.4767	1.79	1.682	2.166
1ST QUARTILE	:	27.0	19.9	4.04	0.0626	2.82	0.415	0.085
2ND QUARTILE	•	37.3	37.4	4.13	0.0866	4.13	0.530	0.150
3RD QUARTILE	:	55.0	41.9	4.28	0.1055	4.63	0.655	0.350
VOL. WGT. MEAN	:	*****	30.9	*****	0.0823	3.55	0.469	0.188

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83	PAGE: 2
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		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	8.000	9.000	11.000	9.000	8.000	11.000	8.0000
MUMIXAM		0.200	1.430	0.080	0.110	0.105	0.940	0.0380
MINIMUM	:	0.030	0.280	0.005	0.002	0.010	0.236	0.0005
RANGE	:	0.170	1.150	0.075	0.108	0.095	0.704	0.0375
ARITH. MEAN	:	0.116	0.712	0.045	0.050	0.059	0.509	0.0178
ARITH. STD. DEV	:	0.057	0.370	0.029	0.039	0.034	0.214	0.0135
GEOM. MEAN	:	0.100	0.634	0.033	0.030	0.048	0.473	0.0110
GEOM. STD. DEV.	:	1.889	1.672	2.567	3.801	2.172	1.483	4.0012
1ST QUARTILE	:	0.065	0.440	0.012	0.012	0.035	0.368	0.0085
2ND QUARTILE	:	0.135	0.530	0.037	0.040	0.057	0.445	0.0160
3RD QUARTILE	:	0.150	0.835	0.072	0.070	0.087	0.545	0.0275
VOL. WGT. MEAN	:	0.106	0.672	0.035	0.044	0.053	0.459	0.0192

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83 PAGE :	PERIOD	OD O	0F	REPORT	:	JAN	5,8	82	TO	JAN	4,83	PAG	GE :	3
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		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	9.0000	10.0000	9.000	10.0000	10.0000	10.0000	10.000
MAXIHUM		0.0070	0.0090	0.016	0.1830	0.0210	0.0010	0.132
MINIMUM	•	0.0010	0.0005	0.002	0.0119	0.0005	0.0010	0.008
RANGE	•	0.0060	0.0085	0.014	0.1711	0.0205	0.0000	0.124
ARITH. MEAN	:	0.0039	0.0018	0.008	0.0678	0.0090	0.0010	0.053
ARITH. STD. DEV	:	0.0024	0.0027	0.004	0,10558	0.0057	0.0000	0.040
GEOM. MEAN	:	0.0031	0.0010	0.007	0.0471	0.0067	0.0010	0.038
GEOM. STD. DEV.	:	2.1936	2.7410	1.818	2.6104	2.8022	1.0000	2.615
1ST QUARTILE	:	0.0015	0.0005	0.004	0.0158	0.0045	0.0010	0.015
2ND QUARTILE	:	0.0035	0.0007	0.008	0.0607	0.0085	0.0010	0.051
3RD QUARTILE	:	0.0055	0.0010	0.010	0.0859	0.0110	0.0010	0.078
VOL. WGT. MEAN	:	0.0031	0.0011	0.007	0.0465	0.0077	0.0010	0.038

## ONTARIO MINISTRY OF THE ENVIRONMENT SUHMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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		COPPER CADMIUM		FREE H+
		MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	10.00000	12.0000
MUMIXAM	:	0.0090	0.00050	0.1259
MINIMUM	:	0.0008	0.00005	0.0031
RANGE	;	0.0082	0.00045	0.1228
ARITH. MEAN	:	0.0039	0.00019	0.0681
ARITH. STD. DEV	:	0.0030	0.00019	0.0356
GEOM. MEAN	:	0.0028	0.00012	0.0492
GEOM. STD. DEV.	:	2.5683	2.67122	3.0637
1ST QUARTILE	:	0.0009	0.00005	0.0525
2ND QUARTILE	:	0.0034	0.00010	0.0742
3RD QUARTILE	:	0.0060	0.00025	0.0912
VOL. WGT. MEAN	*	0.0030	0.00015	0.0625

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	•	DEC 31,80	TO NOV 30,81				PAGE : 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		1911	Onno/ Ch		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	11.0	10.0	11.00	10.0000	10.00	10.000	10.000
MAXIMUM	•	147.0	49.2	5.13	0.1432	5.95	0.740	0.720
MINIMUM	:	9.0	24.6	3.98	0.0582	2.90	0.320	0.080
RANGE	•	138.0	24.6	1.15	0.0850	3.05	0.420	0.640
ARITH. MEAN	:	71.6	36.4	4.33	0.1011	4.53	0.477	0.302
ARITH. STD. DEV	:	42.4	7.2	0.32	0.0226	1.25	0.136	0.221
GEOM. MEAN	:	57.6	35.7	4.32	0.0986	4.36	0.461	0.233
GEOM. STD. DEV.	:	2.2	1.2	1.07	1.2694	1.34	1.309	2.189
1ST QUARTILE	:	36.5	31.1	4.09	0.0874	3.13	0.370	0.110
2ND QUARTILE	*	56.0	35.8	4.20	0.1016	4.70	0.440	0.240
3RD QUARTILE	:	110.0	40.5	4.41	0.1055	5.63	0.515	0.390
VOL. WGT. MEAN	:	*****	35.5	*****	0.1013	4.39	0.448	0.280

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE : 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	9.0000	8.000	9.0000	10.0000	10.0000	9.000
MUMIXAM	:	0.0080	0.0220	0.026	0.2970	0.0310	0.0010	0.219
MINIMUM	:	0.0005	0.0005	0.001	0.0396	0.0050	0.0010	0.014
RANGE	:	0.0075	0.0215	0.025	0.2574	0.0260	0.0000	0.205
ARITH. MEAN	:	0.0032	0.0086	0.012	0.0923	0.0128	0.0010	0.056
ARITH. STD. DEV	:	0.0021	0.0078	0.008	0.0821	0.0089	0.0000	0.066
GEOM. MEAN	:	0.0026	0.0048	0.009	0.0739	0.0106	0.0010	0.037
GEOM. STD. DEV.	:	2.1190	3.8038	2.399	1.8835	1.8468	1.0000	2.522
1ST QUARTILE	:	0.0020	0.0015	0.007	0.0493	0.0065	0.0010	0.018
2ND QUARTILE	:	0.0025	0.0045	0.010	0.0602	0.0085	0.0010	0.022
3RD QUARTILE	:	0.0040	0.0130	0.016	0.0683	0.0140	0.0010	0.059
VOL. WGT. MEAN	:	0.0026	0.0099	0.010	0.0772	0.0153	0.0010	0.039

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	: DEC	31,80	TO	NOV 30,81	
		COPPER		CADMIUM	FREE H+ LAB
		MG/L		MG/L	MG/L
# OF SAMPLES	:	9.0000		9.00000	11.0000
MAXIMUM		0.0427		0.00120	0.1047
MINIMUM	•	0.0027		0.00010	0.0074
RANGE		0.0400		0.00110	0.0973
ARITH. MEAN		0.0170		0.00038	0.0565
ARITH. STD. DEV	•	0.0139		0.00037	0.0286
GEOM. MEAN	•	0.0125		0.00025	0.0471
GEOM. STD. DEV.	•	2.3686		2.65396	2.0965
1ST QUARTILE	•	0.0072		0.00010	0.0310
2ND QUARTILE	:	0.0116		0.00015	0.0516
3RD QUARTILE	:	0.0164		0.00050	0.0725
VOL. WGT. MEAN	•	0.0190		0.00048	0.0616

PAGE : 4

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	UMHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	13.0	12.0	13.00	12.0000	12.00	12.000	12.000
MUMIXAM	:	121.0	69.5	4.57	0.1574	8.50	0.960	0.730
MINIMUM	:	8.0	11.8	3.76	0.0464	1.30	0.160	0.090
RANGE	:	113.0	57.7	0.81	0.1110	7.20	0.800	0.640
ARITH. MEAN	:	59.6	35.5	4.19	0.0952	3.60	0.549	0.237
ARITH. STD. DEV	:	37.3	14.7	0.21	0.0307	1.87	0.233	0.179
GEOM. MEAN	:	47.4	32.6	4.19	0.0905	3.24	0.498	0.194
GEOM. STD. DEV.	:	2.2	1.6	1.05	1.4045	1.61	1.641	1.870
1ST QUARTILE	:	25.5	26.5	4.08	0.0746	2.50	0.390	0.115
2ND QUARTILE	:	50.5	33.6	4.17	0.0929	3.10	0.485	0.190
3RD QUARTILE	:	71.6	41.7	4.25	0.1121	4.42	0.735	0.280
VOL. WGT. MEAN	:	*****	32.5	****	0.0910	3.24	0.483	0.185

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83 PAGE : 2

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	11.000	11.000	12.000	11.000	11.000	11.000	10.0000
MAXIMUM	ì	0.370	1.800	0.150	0.100	0.200	0.660	0.0450
MINIMUM	•	0.030	0.230	0.005	0.000	0.005	0.050	0.0010
RANGE	•	0.340	1.570	0.145	0.100	0.195	0.610	0.0440
ARITH. MEAN	•	0.158	0.615	0.044	0.043	0.080	0.364	0.0109
ARITH. STD. DEV	:	0.102	0.494	0.039	0.035	0.059	0.175	0.0126
GEOM. MEAN	:	0.126	0.498	0.032	0.040	0.055	0.308	0.0071
GEOM. STD. DEV.	:	2.132	1.886	2.421	3.784	2.920	2.044	2.6559
1ST QUARTILE	:	0.055	0.295	0.025	0.002	0.023	0.196	0.0045
2ND QUARTILE	:	0.140	0.440	0.030	0.037	0.067	0.353	0.0075
3RD QUARTILE	:	0.200	0.530	0.055	0.065	0.092	0.485	0.0105
VOL. WGT. MEAN	•	0.138	0.448	0.032	0.035	0.073	0.367	0.0068

# APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	ž	11.0000	10.0000	11.000	10.0000	11.0000	11.0000	11.000
MAXIMUM	:	0.0100	0.0210	0.021	0.1600	0.0260	0.0020	0.175
MINIHUM	:	0.0010	0.0005	0.001	0.0104	0.0040	0.0010	0.004
RANGE	:	0.0090	0.0205	0.020	0.1496	0.0220	0.0010	0.171
ARITH. MEAN	:	0.0034	0.0038	0.008	0.0648	0.0103	0.0011	0.056
ARITH. STD. DEV	:	0.0030	0.0062	0.006	0.0594	0.0070	0.0003	0.057
GEOM. MEAN	:	0.0025	0.0018	0.006	0.0414	0.0086	0.0011	0.028
GEOM. STD. DEV.	:	2.2019	3.4189	2.397	2.8119	1.8325	1.2324	3.970
1ST QUARTILE	:	0.0010	0.0005	0.002	0.0153	0.0050	0.0010	0.007
2ND QUARTILE	:	0.0020	0.0015	0.006	0.0337	0.0070	0.0010	0.028
3RD QUARTILE	:	0.0035	0.0035	0.010	0.1064	0.0115	0.0010	0.092
VOL. WGT. MEAN	:	0.0022	0.0036	0.006	0.0498	0.0099	0.0010	0.033

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD	0F	REPORT	:	JAN	5.82	TO	JAN	4.83

		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES		10.0000	11.00000	13.0000
MUMIXAM	:	0.0467	0.00090	0.1738
MINIHUM	•	0.0007	0.00005	0.0269
RANGE		0.0460	0.00085	0.1469
ARITH. MEAN	:	0.0088	0.00016	0.0718
ARITH. STD. DEV	:	0.0137	0.00025	0.0383
GEOM. MEAN	:	0.0044	0.00010	0.0641
GEOM. STD. DEV.	•	3.2606	2.34017	1.6350
1ST QUARTILE	:	0.0018	0.00005	0.0487
2ND QUARTILE	•	0.0037	0.00010	0.0625
3RD QUARTILE	:	0.0072	0.00010	0.0725
VOL. WGT. MEAN	:	0.0091	0.00017	0.0678

PAGE: 4

1.2

36.2

39.3

44.4

43.9

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81

		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	UMHO/CM		MG/L	MG/L	HG/L	MG/L
# OF SAMPLES	:	11.0	9.0	11.00	10.0000	10.00	10.000	9.000
MUMIXAM	:	97.5	64.5	4.43	0.2580	11.70	1.120	0.630
MINIHUM	:	13.6	33.6	3.64	0.0834	3.25	0.440	0.150
RANGE	:	83.9	30.9	0.79	0.1746	8.45	0.680	0.480
ARITH. MEAN	:	63.7	43.6	4.05	0.1305	5.53	0.693	0.388
ARITH. STD. DEV	:	29.7	10.1	0.22	0.0514	2.45	0.230	0.152
GEOM. MEAN		55.2	42.7	4.04	0.1235	5.17	0.663	0.357

1.06

3.85

4.05

4.14

\*\*\*\*\*

1.3938

0.0967

0.1136

0.1358

0.1253

1.45

4.10

4.40

6.17

5.08

PAGE: 1

1.359

0.520

0.605

0.735

0.633

1.570

0.265

0.365

0.465

0.368

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

1.9

34.1

65.5

87.6

GEOM. STD. DEV. :

VOL. WGT. MEAN :

1ST QUARTILE

2ND QUARTILE

3RD QUARTILE

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

0.298

0.743

VOL. WGT. MEAN :

PERIOD OF REPORT		DEC 31,80	TO NOV 30,81	¥ •			PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	10.000	10.000	10.000	10.000	10.000	10.000	9.0000
MAXIMUM	:	0.770	2.000	0.300	0.110	0.160	1.050	0.0240
MINIHUM	:	0.090	0.440	0.040	0.010	0.010	0.322	0.0040
RANGE	1	0.680	1.560	0.260	0.100	0.150	0.728	0.0200
ARITH. MEAN	:	0.296	0.874	0.106	0.044	0.055	0.610	0.0108
ARITH. STD. DEV	•	0.189	0.489	0.078	0.034	0.048	0.242	0.0074
GEOM. MEAN	:	0.254	0.779	0.087	0.034	0.039	0.572	0.0088
GEOM. STD. DEV.	•	1.779	1.619	1.879	2.103	2.477	1.451	1.9293
1ST QUARTILE	•	0.165	0.515	0.050	0.020	0.020	0.430	0.0050
2ND QUARTILE	:	0.280	0.705	0.075	0.030	0.040	0.575	0.0070
3RD QUARTILE		0.285	0.935	0.132	0.050	0.070	0.620	0.0125

0.090

0.040

0.047

0.546

0.0099

## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

#### STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE : 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	10.0000	10.000	10.0000	10.0000	10.0000	10.000
MAXIMUM	:	0.0140	0.0020	0.028	0.1860	0.0140	0.0010	0.190
MINIMUM	:	0.0030	0.0005	0.005	0.0285	0.0050	0.0010	0.018
RANGE	:	0.0110	0.0015	0.023	0.1575	0.0090	0.0000	0.172
ARITH. MEAN	:	0.0054	0.0007	0.013	0.0775	0.0096	0.0010	0.068
ARITH. STD. DEV	:	0.0036	0.0005	0.007	0.0545	0.0024	0.0000	0.060
GEOM. MEAN	:	0.0047	0.0007	0.011	0.0630	0.0093	0.0010	0.051
GEOM. STD. DEV.	:	1.7001	1.6236	1.632	1.9539	1.3190	1.0000	2.167
1ST QUARTILE	:	0.0030	0.0005	0.008	0.0331	0.0080	0.0010	0.029
2ND QUARTILE	:	0.0040	0.0005	0.011	0.0611	0.0095	0.0010	0.040
3RD QUARTILE	:	0.0055	0.0007	0.013	0.0933	0.0110	0.0010	0.069
VOL. WGT. MEAN	:	0.0047	0.0008	0.012	0.0736	0.0090	0.0010	0.066

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

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PERIOD	DE	REPORT		DEC	<b>31</b>	. 80	TO	NOV 7	20 R1	

		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	10.00000	11.0000
MAXIMUM	:	0.0223	0.00040	0.2291
MINIMUM	:	0.0007	0.00005	0.0372
RANGE	:	0.0216	0.00035	0.1919
ARITH. MEAN	:	0.0052	0.00016	0.1002
ARITH. STD. DEV	:	0.0069	0.00012	0.0535
GEOM. MEAN	:	0.0029	0.00012	0.0893
GEOM. STD. DEV.	:	2.9357	2.28883	1.6443
1ST QUARTILE	:	0.0014	0.00005	0.0622
2ND QUARTILE	•	0.0019	0.00015	0.0804
3RD QUARTILE	:	0.0044	0.00020	0.1156
VOL. WGT. MEAN	:	0.0059	0.00014	0.0917

PAGE : 4

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PAGE: 1

0.865

0.584

0.695

0.399

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83

				See S. Common Line Advisors					
			PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
			ММ	UMHO/CM	LAG	MG/L	MG/L	MG/L	MG/L
# 0	F SAMPLES	:	13.0	12.0	13.00	12.0000	12.00	12.000	11.000
MAX	IMUM	*	136.0	66.5	5.06	0.1696	7.55	1.020	0.970
MIN	IMUM	:	23.0	21.0	3.66	0.0452	2.00	0.280	0.140
RAN	GE	:	113.0	45.5	1.40	0.1244	5.55	0.740	0.830
ARI	TH. MEAN	:	68.2	42.2	4.15	0.1090	4.64	0.651	0.465
ARI	TH. STD. DEV	:	34.2	16.9	0.38	0.0444	1.89	0.252	0.313
GEO	M. MEAN	:	60.2	39.0	4.13	0.1003	4.27	0.601	0.367
GEO	M. STD. DEV.	:	1.7	1.5	1.09	1.5519	1.55	1.542	2.107
1ST	QUARTILE	:	39.0	27.3	3.86	0.0726	2.85	0.425	0.150
2ND	QUARTILE	:	57.0	37.1	4.01	0.0996	4.85	0.675	0.305

4.31

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0.1518

0.1060

6.00

4.20

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

83.0

57.0

39.4

3RD QUARTILE

VOL. WGT. MEAN :

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83 PAGE : 2

							to soometime to the	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	•	13.000	10.000	11.000	11.000	12.000	13.000	11.0000
MAXIMUM	•	0.520	0.760	0.285	0.190	0.130	1.740	0.0720
MINIMUM	:	0.150	0.350	0,030	0.002	0.000	0.232	0.0005
RANGE	•	0.370	0.410	0.255	0.188	0.130	1.508	0.0715
ARITH. MEAN	:	0.278	0.545	0.102	0.040	0.069	0.658	0.0206
ARITH. STD. DEV	•	0.124	0.142	0.080	0.052	0.045	0.480	0.0247
GEOM. MEAN	•	0.254	0.527	0.079	0.021	0.079	0.535	0.0094
GEOM. STD. DEV.	•	1.540	1.317	2.101	3.618	1.968	1.917	4.6383
1ST QUARTILE	•	0.165	0.390	0.040	0.006	0.030	0.305	0.0030
2ND QUARTILE		0.245	0.555	0.067	0.030	0.067	0.495	0.0110
3RD QUARTILE	:	0.340	0.640	0.127	0.040	0.108	0.730	0.0195
VOL. WGT. MEAN		0.246	0.535	0.086	0.028	0.063	0.504	0.0197

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83 PAGE : 3

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	11.0000	11.000	10.0000	11.0000	11.0000	10.000
MAXIMUM	:	0.0170	0.0010	0.031	0.1090	0.0130	0.0010	0.098
MINIMUM	:	0.0005	0.0005	0.002	0.0105	0.0010	0.0010	0.012
RANGE	:	0.0165	0.0005	0.028	0.0985	0.0120	0.0000	0.086
ARITH. MEAN	:	0.0054	0.0005	0.009	0.0476	0.0055	0.0010	0.041
ARITH. STD. DEV	:	0.0052	0.0002	0.008	0.0369	0.0030	0.0000	0.031
GEOM. MEAN	:	0.0035	0.0005	0.007	0.0356	0.0047	0.0010	0.031
GEOM. STD. DEV.	+	2.9656	1.2324	2.231	2.2699	1.9091	1.0000	2.169
1ST QUARTILE	:	0.0015	0.0005	0.003	0.0177	0.0030	0.0010	0.016
2ND QUARTILE	:	0.0040	0.0005	0.005	0.0338	0.0050	0.0010	0.024
3RD QUARTILE	:	0.0070	0.0005	0.011	0.0655	0.0060	0.0010	0.061
VOL. WGT. MEAN	:	0.0044	0.0006	0.008	0.0375	0.0051	0.0010	0.033

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN	4,83
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		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES	:	11.0000	11.00000	13.0000
MUMIXAM	:	0.0039	0.00030	0.2188
MINIMUM	:	0.0007	0.00005	0.0087
RANGE	:	0.0032	0.00025	0.2101
ARITH. MEAN	:	0.0013	0.00008	0.0931
ARITH. STD. DEV	•	0.0009	0.00008	0.0604
GEOM. MEAN	:	0.0011	0.00007	0.0713
GEOM. STD. DEV.	:	1.6377	1.76891	2.3789
1ST QUARTILE	:	0.0008	0.00005	0.0423
2ND QUARTILE	:	0.0009	0.00005	0.0813
3RD QUARTILE	:	0.0014	0.00008	0.1192
VOL. WGT. MEAN	:	0.0011	0.00007	0.0857

PAGE: 4

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+	SULPHATE	NITRATE	CALCIUM
		ММ	инно/см	LAD	TO PH8.3 MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	11.0	9.0	9.00	9.0000	9.00	9.000	9.000
MAXIMUM	:	101.0	69.0	4.39	0.1830	7.15	1.270	1.440
MINIMUM	:	14.7	30.3	3.80	0.0844	3.20	0.540	0.230
RANGE	:	86.3	38.7	0.59	0.0986	3.95	0.730	1.210
ARITH. MEAN	:	64.2	49.1	4.09	0.1301	5.37	0.708	0.479
ARITH. STD. DEV	:	27.9	14.5	0.20	0.0366	1.36	0.227	0.378
GEOM. MEAN	:	56.6	47.2	4.09	0.1255	5.20	0.683	0.402
GEOM. STD. DEV.	:	1.8	1.3	1.05	1.3331	1.31	1.305	1.760
1ST QUARTILE	:	33.1	36.0	3.92	0.0945	4.20	0.565	0.270
2ND QUARTILE	:	65.0	45.6	4.03	0.1217	5.13	0.600	0.310
3RD QUARTILE	:	83.6	55.0	4.20	0.1475	6.15	0.735	0.455
VOL. WGT. MEAN	:	*****	49.0	*****	0.1315	5.30	0.664	0.404

\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 2

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR	
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	
# OF SAMPLES	:	9.000	9.000	9.000	9.000	9.000	9.000	9.0000	
MAXIMUM	:	0.490	1.440	0.415	0.080	0.200	1.120	0.0330	
MINIMUM	•	0.090	0.350	0.055	0.020	0.020	0.254	0.0030	
RANGE	•	0.400	1.090	0.360	0.060	0.180	0.866	0.0300	
ARITH. MEAN	•	0.256	0.782	0.134	0.044	0.087	0.614	0.0181	
ARITH. STD. DEV	:	0.116	0.299	0.112	0.020	0.059	0.228	0.0089	
GEOM. MEAN	:	0.232	0.735	0.108	0.040	0.068	0.576	0.0152	
GEOM. STD. DEV.		1.626	1.462	1.910	1.628	2.156	1.474	2.0929	
1ST QUARTILE	:	0.175	0.635	0.062	0.025	0.035	0.505	0.0110	
2ND QUARTILE	•	0.230	0.700	0.090	0.040	0.065	0.615	0.0200	
3RD QUARTILE		0.290	0.810	0.140	0.055	0.115	0.630	0.0215	
VOL. WGT. MEAN	:	0.231	0.734	0.111	0.045	0.075	0.577	0.0186	

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	9.0000	8.000	9.0000	9.0000	9.0000	9.000
MAXIMUM	:	0.0130	0.0030	0.028	0.1580	0.0170	0.0010	0.161
MINIMUM	:	0.0020	0.0005	0.006	0.0272	0.0050	0.0010	0.019
RANGE	:	0.0110	0.0025	0.022	0.1308	0.0120	0.0000	0.142
ARITH. MEAN	:	0.0052	0.0011	0.012	0.0746	0.0103	0.0010	0.062
ARITH. STD. DEV	:	0.0033	0.0010	0.007	0.0483	0.0040	0.0000	0.049
GEOM. MEAN	:	0.0045	0.0008	0.011	0.0624	0.0097	0.0010	0.047
GEOM. STD. DEV.	:	1.7349	2.1591	1.647	1.8819	1.4708	1.0000	2.186
1ST QUARTILE	:	0.0030	0.0005	0.007	0.0351	0.0075	0.0010	0.020
2ND QUARTILE	:	0.0040	0.0005	0.011	0.0559	0.0090	0.0010	0.046
3RD QUARTILE	:	0.0055	0.0012	0.013	0.0780	0.0110	0.0010	0.060
VOL. WGT. MEAN	:	0.0047	0.0012	0.011	0.0715	0.0093	0.0010	0.061

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT : D	EC 31,80 T	TO NOV 30,81
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		000000	a patrior	
		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	9.00000	9.0000
MAXIMUM	:	0.0168	0.00040	0.1585
MINIMUM	:	0.0012	0.00005	0.0407
RANGE	•	0.0156	0.00035	0.1178
ARITH. MEAN		0.0046	0.00021	0.0891
ARITH. STD. DEV	:	0.0050	0.00012	0.0395
GEOM. MEAN	:	0.0032	0.00017	0.0813
GEOM. STD. DEV.	:	2.3916	2.13303	1.5853
1ST QUARTILE	:	0.0015	0.00012	0.0541
2ND QUARTILE	:	0.0024	0.00020	0.0786
3RD QUARTILE	:	0.0042	0.00020	0.1026
VOL. WGT. MEAN	:	0.0049	0.00018	0.0920

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE	CALCIUM
		ММ	ИМНО/СМ	EAD	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	13.0	12.0	12.00	13.0000	13.00	13.000	12.000
MUMIXAM	:	143.0	72.5	4.32	0.1834	8.05	1.610	1.150
MINIMUM	:	21.0	23.5	3.76	0.0560	2.15	0.330	0.140
RANGE	:	122.0	49.0	0.56	0.1274	5.90	1.280	1.010
ARITH. MEAN	:	78.2	45.7	4.03	0.1208	5.10	0.748	0.502
ARITH. STD. DEV	ï	34.4	17.7	0.22	0.0443	1.93	0.331	0.352
GEOM. MEAN	ŧ	69.8	42.5	4.02	0.1130	4.74	0.686	0.393
GEOM. STD. DEV.	:	1.7	1.5	1.06	1.4736	1.52	1.542	2.114
1ST QUARTILE	:	51.0	29.3	3.80	0.0849	3.42	0.520	0.195
2ND QUARTILE		77.0	40.9	4.03	0.1012	4.93	0.695	0.385
3RD QUARTILE	:	94.4	60.8	4.25	0.1543	6.00	0.845	0.810
VOL. WGT. MEAN	:	*****	43.9	*****	0.1164	4.64	0.667	0.389

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83 . PAGE : 2

		CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	PHOSPHOR MG/L
# OF SAMPLES	:	11.000	12.000	13.000	13.000	11.000	13.000	10.0000
MUMIXAM	:	0.330	1.180	0.520	0.095	0.145	0.870	0.0490
MINIMUM	:	0.130	0.280	0.040	0.002	0.015	0.184	0.0000
RANGE	:	0.200	0.900	0.480	0.093	0.130	0.686	0.0490
ARITH. MEAN	:	0.219	0.699	0.169	0.042	0.061	0.494	0.0125
ARITH. STD. DEV	:	0.070	0.289	0.153	0.028	0.051	0.226	0.0155
GEOM. MEAN	:	0.209	0.638	0.116	0.031	0.042	0.438	0.0123
GEOM. STD. DEV.	:	1.381	1.596	2.466	2.709	2.512	1.721	3.6357
1ST QUARTILE	:	0.150	0.445	0.050	0.020	0.015	0.227	0.0012
2ND QUARTILE	•	0.200	0.685	0.092	0.040	0.032	0.515	0.0070
3RD QUARTILE	:	0.255	0.955	0.197	0.052	0.108	0.615	0.0125
VOL. WGT. MEAN	:	0.214	0.640	0.131	0.043	0.062	0.437	0.0102

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT		JAN 5,82	TO JAN 4,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	12.0000	12.0000	12.000	12.0000	12.0000	12.0000	12.000
MUMIXAM	:	0.0220	0.0020	0.030	0.2020	0.0110	0.0010	0.205
MINIMUM	:	0.0005	0.0005	0.002	0.0133	0.0020	0.0010	0.013
RANGE	:	0.0215	0.0015	0.027	0.1887	0.0090	0.0000	0.192
ARITH. MEAN	:	0.0050	0.0006	0.008	0.0633	0.0068	0.0010	0.057
ARITH. STD. DEV	:	0.0058	0.0004	0.008	0.0595	0.0024	0.0000	0.063
GEOM. MEAN	:	0.0033	0.0006	0.007	0.0439	0.0063	0.0010	0.036
GEOM. STD. DEV.	:	2.5081	1.4921	1.974	2.4286	1.5770	1.0000	2.571
1ST QUARTILE	:	0.0020	0.0005	0.004	0.0239	0.0055	0.0010	0.018
2ND QUARTILE	:	0.0030	0.0005	0.005	0.0396	0.0070	0.0010	0.023
3RD QUARTILE	:	0.0050	0.0005	0.010	0.0829	0.0085	0.0010	0.075
VOL. WGT. MEAN	:	0.0043	0.0006	0.007	0.0562	0.0066	0.0010	0.051

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF	REPORT	: JAN	5,82	TO	JAN	4,83	

		COPPER	CADMIUM	FREE H+ Lab
		MG/L	MG/L	MG/L
# OF SAMPLES	:	12.0000	12.00000	12.0000
MUMIXAM	:	0.0029	0.00050	0.1738
MINIMUM	:	0.0007	0.00005	0.0479
RANGE	:	0.0021	0.00045	0.1259
ARITH. MEAN	•	0.0014	0.00010	0.1054
ARITH. STD. DEV	:	0.0007	0.00013	0.0506
GEOM. MEAN	•	0.0013	0.00007	0.0940
GEOM. STD. DEV.	:	1.6397	1.98135	1.6626
1ST QUARTILE	:	0.0008	0.00005	0.0564
2ND QUARTILE	:	0.0013	0.00005	0.0934
3RD QUARTILE	:	0.0018	0.00010	0.1603
VOL. WGT. MEAN	:	0.0012	0.00011	0.1031

PAGE: 4

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	инно/см		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0	8.0	4.00	8.0000	10.00	10.000	3.000
MAXIMUM	:	112.0	77.5	4.73	0.1172	12.00	0.940	2.000
MINIM	:	5.9	25.0	4.12	0.0314	4.85	0.540	0.950
RANGE	:	106.1	52.5	0.61	0.0858	7.15	0.400	1.050
ARITH. MEAN	:	56.0	41.5	4.41	0.0611	7.05	0.782	1.433
ARITH. STD. DEV	:	35.8	15.8	0.27	0.0331	2.25	0.121	0.530
GEOM. MEAN	:	41.8	39.4	4.40	0.0541	6.78	0.773	1.369
GEOM. STD. DEV.	:	2.6	1.4	1.06	1.6910	1.33	1.181	1.451
1ST QUARTILE	:	19.3	32.8	4.18	0.0329	5.55	0.695	****
2ND QUARTILE	:	54.1	39.2	4.39	0.0518	6.05	0.780	*****
3RD QUARTILE	:	71.0	42.8	4.63	0.0856	7.60	0.850	*****
VOL. WGT. MEAN	:	*****	38.7	*****	0.0687	6.52	0.777	1.101

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 2

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	ž	7.000	8.000	10.000	9.000	7.000	10.000	8.0000
MAXIMUM	•	1.020	1.350	0.825	0.150	0.280	1.040	0.0700
MINIMUM	:	0.350	0.510	0.185	0.030	0.060	0.282	0.0100
RANGE		0.670	0.840	0.640	0.120	0.220	0.758	0.0600
ARITH. MEAN	:	0.697	0.921	0.482	0.082	0.146	0.640	0.0351
ARITH. STD. DEV	:	0.269	0.297	0.209	0.043	0.086	0.231	0.0256
GEOM. MEAN	:	0.650	0.880	0.438	0.072	0.126	0.601	0.0272
GEOM. STD. DEV.	:	1.509	1.387	1.618	1.733	1.798	1.475	2.1840
1ST QUARTILE	Ĩ	0.405	0.735	0.282	0.045	0.070	0.465	0.0155
2ND QUARTILE	:	0.580	0.850	0.465	0.070	0.095	0.620	0.0225
3RD QUARTILE	:	0.945	1.170	0.555	0.095	0.205	0.690	0.0625
VOL. WGT. MEAN	•	0.616	0.918	0.465	0.087	0.136	0.661	0.0309

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	: DEC 31,80	TO	NOV 30,81	PAGE	3	

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	8.0000	8.0000	6.000	7.0000	8.0000	8.0000	7.000
MUMIXAM	:	0.0320	0.0040	0.069	0.4540	0.0870	0.0030	0.325
MINIMUM	:	0.0040	0.0005	0.022	0.1540	0.0005	0.0010	0.068
RANGE	:	0.0280	0.0035	0.047	0.3000	0.0865	0.0020	0.257
ARITH. MEAN	:	0.0164	0.0013	0.052	0.2704	0.0436	0.0012	0.168
ARITH. STD. DEV	:	0.0085	0.0012	0.019	0.1110	0.0254	0.0007	0.082
GEOM. MEAN		0.0142	0.0010	0.048	0.2529	0.0264	0.0011	0.152
GEOM. STD. DEV.	•	1.8629	2.0980	1.577	1.4760	5.1772	1.4746	1.625
1ST QUARTILE	:	0.0120	0.0005	0.030	0.1745	0.0300	0.0010	0.092
2ND QUARTILE	:	0.0140	0.0010	0.057	0.2150	0.0445	0.0010	0.146
3RD QUARTILE	;	0.0215	0.0015	0.067	0.3300	0.0560	0.0010	0.186
VOL. WGT. MEAN	:	0.0132	0.0011	0.050	0.2597	0.0371	0.0011	0.155

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STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE :	PAGE :	NOV 30,81	TO	: DEC 31,80	PERIOD OF REPORT
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		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES	•	6.0000	8.00000	4.0000
MAXIHUM	:	0.0276	0.00100	0.0759
MINIHUM	:	0.0092	0.00005	0.0186
RANGE	•	0.0184	0.00095	0.0572
ARITH. MEAN	:	0.0190	0.00042	0.0451
ARITH. STD. DEV	:	0.0078	0.00031	0.0259
GEOH. MEAN	:	0.0175	0.00030	0.0391
GEOM. STD. DEV.	:	1.5870	2.74849	1.8826
1ST QUARTILE	:	0.0102	0.00015	0.0241
2ND QUARTILE	:	0.0197	0.00040	0.0429
3RD QUARTILE	:	0.0245	0.00060	0.0660
VOL. WGT. MEAN	:	0.0171	0.00033	0.0521

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	UMHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	13.0	12.0	9.00	12.0000	12.00	12.000	7.000
MAXIMUM	÷	122.0	77.5	5.09	0.1278	17.80	2.020	1.880
MINIMUM	£	31.1	31.0	4.00	0.0284	2.20	0.480	0.670
RANGE	:	90.9	46.5	1.09	0.0994	15.60	1.540	1.210
ARITH. MEAN	:	68.4	45.1	4.42	0.0726	7.57	0.967	1.251
ARITH. STD. DEV	•	24.9	13.5	0.35	0.0324	4.30	0.420	0.470
GEOM. MEAN	:	64.3	43.5	4.40	0.0657	6.56	0.899	1.174
GEOM. STD. DEV.	:	1.5	1.3	1.08	1.6267	1.76	1.475	1.481
1ST QUARTILE	:	51.0	34.7	4.06	0.0491	5.10	0.715	0.730
2ND QUARTILE	:	63.8	41.4	4.39	0.0671	6.70	0.820	1.090
3RD QUARTILE	:	77.0	54.8	4.56	0.0994	9.52	1.095	1.620
VOL. WGT. MEAN	:	****	46.1	*****	0.0732	8.03	0.999	1.235

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,83 PAGE : 2

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	7.000	12.000	11.000	10.000	8.000	12.000	11.0000
MAXIMUM	:	1.000	2.250	0.625	0.175	0.405	1.730	0.0730
MINIMUM	:	0.310	0.180	0.140	0.020	0.035	0.272	0.0050
RANGE	:	0.690	2.070	0.485	0.155	0.370	1.458	0.0680
ARITH. MEAN	:	0.714	0.910	0.385	0.068	0.174	0.791	0.0228
ARITH. STD. DEV	:	0.263	0.575	0.163	0.044	0.120	0.401	0.0185
GEOM. MEAN	:	0.662	0.749	0.346	0.058	0.135	0.706	0.0181
GEOM. STD. DEV.	:	1.569	1.984	1.668	1.829	2.298	1.656	2.0138
1ST QUARTILE	:	0.355	0.550	0.180	0.037	0.095	0.510	0.0110
2ND QUARTILE	ï	0.750	0.710	0.385	0.062	0.157	0.660	0.0160
3RD QUARTILE	:	0.895	1.330	0.485	0.070	0.222	1.030	0.0280
VOL. WGT. MEAN	:	0.681	0.950	0.397	0.072	0.164	0.813	0.0244

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	12.0000	12.0000	12.000	12.0000	12.0000	12.0000	12.000
MAXIMUM	:	0.0310	0.0040	0.080	0.4620	0.0600	0.0040	0.318
MINIMUM	:	0.0040	0.0005	0.013	0.0822	0.0010	0.0010	0.049
RANGE	:	0.0270	0.0035	0.068	0.3798	0.0590	0.0030	0.269
ARITH. MEAN	:	0.0142	0.0013	0.038	0.2265	0.0319	0.0012	0.139
ARITH. STD. DEV	:	0.0079	0.0012	0.018	0.1259	0.0196	0.0009	0.093
GEOM. MEAN	:	0.0123	0.0010	0.034	0.1952	0.0219	0.0011	0.115
GEOM. STD. DEV.	:	1.7879	2.2161	1.638	1.7920	3.2750	1.4921	1.870
1ST QUARTILE	:	0.0095	0.0005	0.027	0.1227	0.0165	0.0010	0.076
2ND QUARTILE	:	0.0120	0.0007	0.036	0.1980	0.0345	0.0010	0.113
3RD QUARTILE	:	0.0190	0.0020	0.046	0.3115	0.0460	0.0010	0.176
VOL. WGT. MEAN	:	0.0146	0.0015	0.038	0.2205	0.0303	0.0012	0.133

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD	0F	REPORT	:	JAN	5,82	TO	JAN	4.83

		COPPER MG/L	CADMIUM MG/L	FREE H+ Lab MG/L
# OF SAMPLES	:	12.0000	11.00000	9.0000
MAXIMUM	•	0.0207	0.00050	0.1000
MINIHUM		0.0023	0.00005	0.0081
RANGE	:	0.0184	0.00045	0.0919
ARITH. MEAN	:	0.0098	0.00031	0.0490
ARITH. STD. DEV	:	0.0056	0.00018	0.0334
GEOM. MEAN	ř	0.0081	0.00024	0.0383
GEOM. STD. DEV.	i	2.0061	2.37558	2.2277
1ST QUARTILE	:	0.0044	0.00012	0.0254
2ND QUARTILE	ŧ	0.0107	0.00025	0.0314
3RD QUARTILE	:	0.0136	0.00050	0.0631
VOL. WGT. MEAN	:	0.0093	0.00031	0.0487

PAGE : 4

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 1

		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	UMHO/CM	EAD	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	11.0	10.0	11.00	9.0000	10.00	10.000	10.000
MUNIXAM		111.0	90.0	4.30	0.2320	9.05	1.010	1.090
MUMINIM	:	11.3	25.0	3.68	0.0916	3.40	0.560	0.190
RANGE	:	99.7	65.0	0.62	0.1404	5.65	0.450	0.900
ARITH. MEAN	:	67.4	49.7	4.02	0.1396	5.59	0.732	0.496
ARITH. STD. DEV	:	33.2	20.2	0.18	0.0501	1.95	0.161	0.323
GEOM. MEAN	:	57.1	46.4	4.02	0.1323	5.30	0.717	0.418
GEOM. STD. DEV.	:	2.0	1.5	1.04	1.4104	1.41	1.238	1.828
1ST QUARTILE	:	33.3	35.0	3.88	0.0964	3.88	0.590	0.255
2ND QUARTILE	:	65.5	42.9	4.00	0.1106	4.88	0.670	0.360
3RD QUARTILE	:	99.8	58.9	4.14	0.1668	7.15	0.840	0.585
VOL. WGT. MEAN	:	*****	47.7	****	0.1392	5.51	0.702	0.417

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 2

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.000	8.000	10.000	9.000	8.000	10.000	8.0000
MAXIMUM	:	0.390	1.240	0.510	0.070	0.120	1.040	0.0200
MINIMUM	•	0.100	0.540	0.035	0.010	0.020	0.092	0.0020
RANGE	:	0.290	0.700	0.475	0.060	0.100	0.948	0.0180
ARITH. MEAN	•	0.228	0.785	0.125	0.036	0.062	0.580	0.0115
ARITH. STD. DEV	:	0.098	0.221	0.145	0.019	0.042	0.251	0.0061
GEOM. MEAN	•	0.208	0.761	0.086	0.031	0.049	0.506	0.0095
GEOM. STD. DEV.	:	1.586	1.296	2.295	1.817	2.230	1.926	2.1292
1ST QUARTILE	:	0.135	0.645	0.040	0.020	0.020	0.445	0.0065
2ND QUARTILE	•	0.220	0.720	0.070	0.030	0.065	0.565	0.0125
3RD QUARTILE	:	0.280	0.885	0.108	0.045	0.095	0.675	0.0160
VOL. WGT. MEAN		0.213	0.741	0.083	0.035	0.055	0.617	0.0098

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31,80	TO NOV 30,81				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	10.0000	10.000	10.0000	10.0000	10.0000	10.000
MAXIMUM	:	0.0130	0.0040	0.023	0.1530	0.0120	0.0010	0.161
MINIMUM	:	0.0005	0.0005	0.004	0.0261	0.0040	0.0010	0.016
RANGE	:	0.0125	0.0035	0.020	0.1269	0.0080	0.0000	0.145
ARITH. MEAN	:	0.0045	0.0009	0.011	0.0642	0.0083	0.0010	0.059
ARITH. STD. DEV	:	0.0037	0.0011	0.007	0.0436	0.0032	0.0000	0.048
GEOM. MEAN	:	0.0034	0.0007	0.009	0.0521	0.0077	0.0010	0.043
GEOM. STD. DEV.	:	2.4419	1.9535	1.784	1.9802	1.5438	1.0000	2.351
1ST QUARTILE	:	0.0020	0.0005	0.006	0.0273	0.0050	0.0010	0.018
2ND QUARTILE	:	0.0035	0.0005	0.008	0.0493	0.0090	0.0010	0.045
3RD QUARTILE	:	0.0050	0.0005	0.010	0.0899	0.0110	0.0010	0.086
VOL. WGT. MEAN	:	0.0041	0.0009	0.010	0.0593	0.0079	0.0010	0.055

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#### STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	: DEC 31,80	TO	NOV 30,81	PAGE :	4
	DEC 32,00		50,01	FAGE .	

		COPPER MG/L	CADMIUM MG/L	FREE H+ LAB MG/L
# OF SAMPLES	:	9.0000	10.00000	11.0000
MAXIMUM	:	0.0104	0.00030	0.2089
MINIHUM	:	0.0009	0.00005	0.0501
RANGE	:	0.0095	0.00025	0.1588
ARITH. MEAN	:	0.0038	0.00011	0.1023
ARITH. STD. DEV	:	0.0033	0.00009	0.0445
GEOM. MEAN	:	0.0028	0.00008	0.0947
GEOM. STD. DEV.	:	2.2236	2.07101	1.4974
1ST QUARTILE	:	0.0015	0.00005	0.0646
2ND QUARTILE	:	0.0022	0.00005	0.0916
3RD QUARTILE	:	0.0035	0.00015	0.1180
VOL. WGT. MEAN	:	0.0038	0.00009	0.1023

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE	CALCIUM
		нн	инно/см	LAD	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	13.0	13.0	11.00	13.0000	13.00	13.000	12.000
MUMIXAM	:	124.0	92.0	4.54	0.3020	9.25	1.340	1.200
MINIMUM	:	22.5	18.2	3.74	0.0390	2.00	0.370	0.140
RANGE	:	101.5	73.8	0.80	0.2630	7.25	0.970	1.060
ARITH. MEAN	:	67.4	46.5	4.04	0.1233	5.23	0.757	0.488
ARITH. STD. DEV	:	30.3	20.6	0.24	0.0668	2.30	0.293	0.316
GEOM. MEAN	:	60.9	42.3	4.03	0.1088	4.73	0.703	0.399
GEOM. STD. DEV.	:	1.6	1.6	1.06	1.6927	1.61	1.511	1.983
1ST QUARTILE	:	44.5	28.3	3.79	0.0771	3.13	0.495	0.235
2ND QUARTILE	:	62.0	44.3	3.99	0.1130	4.47	0.720	0.415
3RD QUARTILE	:	76.2	57.8	4.18	0.1423	7.00	0.890	0.655
VOL. WGT. MEAN	:	*****	42.8	*****	0.1101	4.92	0.692	0.389

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

|--|

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	13.000	11.000	13.000	12.000	12.000	12.000	11.0000
MAXIMUM	:	0.520	1.560	0.375	0.240	0.115	1.150	0.0520
MINIMUM	•	0.140	0.310	0.030	0.015	0.030	0.150	0.0010
RANGE	•	0.380	1.250	0.345	0.225	0.085	1.000	0.0510
ARITH. MEAN	:	0.266	0.817	0.122	0.082	0.071	0.585	0.0176
ARITH. STD. DEV	:	0.101	0.423	0.100	0.075	0.029	0.307	0.0173
GEOM. MEAN	•	0.251	0.713	0.093	0.053	0.065	0.504	0.0092
GEOM. STD. DEV.	•	1.425	1.760	2.174	2.705	1.594	1.826	4.0026
1ST QUARTILE		0.190	0.370	0.052	0.022	0.042	0.339	0.0025
2ND QUARTILE		0.255	0.805	0.087	0.047	0.077	0.555	0.0100
3RD QUARTILE	•	0.285	1.010	0.123	0.150	0.090	0.790	0.0250
VOL. WGT. MEAN	:	0.253	0.700	0.101	0.073	0.069	0.523	0.0142

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## APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	12.0000	13.0000	11.000	11.0000	13.0000	12.0000	11.000
MAXIMUM	:	0.0170	0.0030	0.032	0.1490	0.0170	0.0010	0.118
MININUM	:	0.0005	0.0005	0.002	0.0178	0.0030	0.0010	0.016
RANGE	:	0.0165	0.0025	0.030	0.1312	0.0140	0.0000	0.102
ARITH. MEAN	:	0.0059	0.0007	0.011	0.0599	0.0076	0.0010	0.046
ARITH. STD. DEV	:	0.0050	0.0007	0.009	0.0446	0.0045	0.0000	0.033
GEOM. MEAN	:	0.0041	0.0006	0.008	0.0469	0.0065	0.0010	0.038
GEOM. STD. DEV.	:	2.6955	1.6781	2.288	2.0760	1.7588	1.0000	1.936
1ST QUARTILE	:	0.0030	0.0005	0.003	0.0232	0.0040	0.0010	0.021
2ND QUARTILE	:	0.0045	0.0005	0.008	0.0361	0.0055	0.0010	0.029
3RD QUARTILE	:	0.0070	0.0005	0.014	0.0907	0.0090	0.0010	0.067
VOL. WGT. MEAN	:	0.0046	0.0007	0.010	0.0483	0.0071	0.0010	0.038

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 4,8	PERIOD	0F	REPORT		JAN	5,82	TO	JAN	4.8
--	--------	----	--------	--	-----	------	----	-----	-----

		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES	:	12.0000	13.00000	11.0000
MAXIMUM	:	0.0055	0.00020	0.1820
MINIMUM	:	0.0007	0.00005	0.0288
RANGE	:	0.0048	0.00015	0.1531
ARITH. MEAN	•	0.0024	0.00008	0.1039
ARITH. STD. DEV	:	0.0016	0.00006	0.0504
GEOM. MEAN	:	0.0019	0.00007	0.0918
GEOM. STD. DEV.	•	2.1433	1.71267	1.7400
1ST QUARTILE	*	0.0007	0.00005	0.0589
2ND QUARTILE	•	0.0023	0.00005	0.0926
3RD QUARTILE		0.0033	0.00008	0.1352
VOL. WGT. MEAN	:	0.0021	0.00007	0.1012

PAGE : 4

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#### PART IV

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY REGION

#### .89

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31,80	TO NOV 30,81				PAGE : 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		MM	UMHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	66.0	57.0	63.00	57.0000	57.00	58.000	56.000
MAXIMUM	•	188.8	90.0	4.67	0.2580	11.70	1.330	1.440
MININUM	•	11.3	25.0	3.64	0.0616	3.15	0.420	0.150
RANGE	:	177.5	65.0	1.03	0.1964	8.55	0.910	1.290
ARITH. MEAN	•	69.4	47.0	4.10	0.1241	5.46	0.725	0.484
ARITH. STD. DEV	:	36.3	15.4	0.20	0.0405	1.86	0.209	0.307
GEOM. MEAN	:	58.8	44.8	4.10	0.1184	5.20	0.699	0.409
GEOM. STD. DEV.	:	1.9	1.4	1.05	1.3530	1.36	1.309	1.777
1ST QUARTILE	:	35.5	35.8	3.97	0.0937	4.17	0.575	0.280
2ND QUARTILE	:	70.5	40.9	4.10	0.1108	4.82	0.690	0.375
3RD QUARTILE	:	92.1	53.3	4.22	0.1472	6.42	0.790	0.625
VOL. WGT. MEAN	:	*****	46.5	*****	0.1226	5.36	0.687	0.442

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

0.884

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

0.242

VOL. WGT. MEAN :

PERIOD OF REPORT		DEC 31,80	TO NOV 30,81				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	58.000	55.000	58.000	58.000	55.000	58.000	54.0000
MUNIXAM	:	0.870	2.000	0.510	0.180	0.230	1.970	0.0820
MINIMUM	:	0.040	0.350	0.030	0.005	0.010	0.092	0.0020
RANGE	:	0.830	1.650	0.480	0.175	0.220	1.878	0.0800
ARITH. MEAN	:	0.269	0.925	0.122	0.049	0.070	0.734	0.0183
ARITH. STD. DEV	:	0.162	0.361	0.102	0.038	0.057	0.312	0.0173
GEOM. MEAN	:	0.230	0.861	0.095	0.037	0.050	0.668	0.0130
GEOM. STD. DEV.	:	1.787	1.470	1.981	2.238	2.403	1.594	2.3084
1ST QUARTILE	:	0.165	0.650	0.055	0.020	0.020	0.555	0.0070
2ND QUARTILE	:	0.230	0.825	0.085	0.040	0.055	0.635	0.0145
3RD QUARTILE	:	0.310	1.145	0.140	0.060	0.100	0.955	0.0215

0.102

0.047

0.060

0.713

0.0189

#### STATION NAME : HALDINAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	58.0000	58.0000	57.000	57.0000	58.0000	58.0000	58.000
MAXIHUM	:	0.0220	0.0040	0.038	0.2500	0.0170	0.0010	0.504
MINIHUM	:	0.0005	0.0005	0.004	0.0158	0.0040	0.0010	0.008
RANGE	:	0.0215	0.0035	0.034	0.2342	0.0130	0.0000	0.496
ARITH. MEAN	:	0.0058	0.0008	0.012	0.0766	0.0098	0.0010	0.073
ARITH. STD. DEV		0.0044	0.0007	0.007	0.0567	0.0033	0.0000	0.079
GEOM. MEAN	:	0.0045	0.0007	0.011	0.0595	0.0093	0.0010	0.049
GEOM. STD. DEV.	:	2.0165	1.7400	1.665	2.0497	1.4291	1.0000	2.397
1ST QUARTILE		0.0030	0.0005	0.008	0.0303	0.0075	0.0010	0.024
2ND QUARTILE	:	0.0040	0.0005	0.010	0.0584	0.0100	0.0010	0.048
3RD QUARTILE	•	0.0070	0.0010	0.014	0.0962	0.0115	0.0010	0.086
VOL. WGT. MEAN	:	0.0054	0.0008	0.011	0.0740	0.0091	0.0010	0.070

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO	NOV 30,81	
		COPPER		CADMIUM	FREE H+
		MG/L		MG/L	HG/L
# OF SAMPLES	:	53.0000		55.00000	63.0000
MUMIXAM	:	0.0257		0.00070	0.2291
MINIMUM	:	0.0007		0.00005	0.0214
RANGE	:	0.0250		0.00065	0.2077
ARITH. MEAN	:	0.0049		0.00017	0.0870
ARITH. STD. DEV	:	0.0056		0.00014	0.0411
GEOM. MEAN	:	0.0030		0.00012	0.0785
GEOM. STD. DEV.	:	2.5429		2.28822	1.5854
1ST QUARTILE	:	0.0015		0.00005	0.0569
2ND QUARTILE	:	0.0024		0.00020	0.0794
3RD QUARTILE	:	0.0071		0.00020	0.1059
VOL. WGT. MEAN	:	0.0048		0.00014	0.0858

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## ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		nin	UNHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	77.0	73.0	70.00	76.0000	76.00	76.000	72.000
MUNIXAM	:	143.0	102.0	5.72	0.3020	10.00	1.700	1.480
MINIMUM	:	19.0	18.2	3.66	0.0242	2.00	0.080	0.130
RANGE	:	124.0	83.8	2.06	0.2778	8.00	1.620	1.350
ARITH. MEAN	:	70.2	44.7	4.13	0.1128	5.06	0.728	0.522
ARITH. STD. DEV	•	31.8	18.7	0.38	0.0495	2.09	0.318	0.347
GEOM. MEAN	•	62.7	41.0	4.12	0.1020	4.64	0.657	0.415
GEOM. STD. DEV.	:	1.7	1.5	1.09	1.5955	1.54	1.625	2.015
1ST QUARTILE	:	45.5	27.5	3.86	0.0759	3.13	0.495	0.225
2ND QUARTILE	:	65.6	40.9	4.07	0.1048	4.88	0.700	0.405
3RD QUARTILE	:	84.6	56.6	4.27	0.1494	6.50	0.915	0.735
VOL. WGT. MEAN	•	*****	42.8	*****	0.1109	4.68	0.650	0.421

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE : 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR
		MG/L	HG/L	MG/L	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	72.000	67.000	73.000	74.000	69.000	76.000	63.0000
MAXIMUM	:	0.880	1.750	0.520	0.240	0.230	2.200	0.0800
MINIMUM	:	0.130	0.180	0.020	0.002	0.000	0.150	0.0000
RANGE	:	0.750	1.570	0.500	0.238	0.230	2.050	0.0800
ARITH. MEAN	:	0.261	0.739	0.129	0.060	0.071	0.638	0.0169
ARITH. STD. DEV	:	0.121	0.360	0.107	0.056	0.049	0.382	0.0202
GEOM. MEAN	:	0.240	0.657	0.096	0.037	0.058	0.540	0.0089
GEOM. STD. DEV.	:	1.489	1.652	2.143	3.068	2.180	1.812	3.8229
1ST QUARTILE	:	0.170	0.485	0.050	0.022	0.030	0.348	0.0040
2ND QUARTILE	:	0.235	0.685	0.082	0.042	0.060	0.575	0.0095
3RD QUARTILE	:	0.320	0.945	0.170	0.072	0.103	0.805	0.0200
VOL. WGT. MEAN	:	0.241	0.676	0.104	0.054	0.066	0.548	0.0160

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5,82	TO JAN 4,83				PAGE: 3	
		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	69.0000	72.0000	68.000	68.0000	72.0000	70.0000	66.000
MUMIXAM	•	0.0240	0.0030	0.032	0.4160	0.0180	0.0020	0.205
MINIMUM	:	0.0005	0.0005	0.002	0.0085	0.0005	0.0010	0.004
RANGE	•	0.0235	0.0025	0.030	0.4075	0.0175	0.0010	0.201
ARITH. MEAN	:	0.0062	0.0007	0.010	0.0668	0.0072	0.0010	0.049
ARITH. STD. DEV	:	0.0057	0.0005	0.007	0.0733	0.0039	0.0001	0.043
GEOM. MEAN	:	0.0041	0.0006	0.008	0.0458	0.0062	0.0010	0.035
GEOM. STD. DEV.	:	2.6781	1.5002	1.981	2.3033	1.8644	1.0864	2.215
1ST QUARTILE	:	0.0020	0.0005	0.004	0.0247	0.0045	0.0010	0.019
2ND QUARTILE	•	0.0040	0.0005	0.007	0.0402	0.0060	0.0010	0.031
3RD QUARTILE	:	0.0075	0.0005	0.012	0.0893	0.0090	0.0010	0.062
VOL. WGT. MEAN	1	0.0051	0.0006	0.008	0.0546	0.0068	0.0010	0.041

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF	REPORT	:	JAN	5,82	TO	JAN	4,83

		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	MG/L
# OF SAMPLES	:	71.0000	72.00000	70.0000
MAXIMUM	•	0.0081	0.00090	0.2188
MINIMUM	:	0.0007	0.00005	0.0019
RANGE	:	0.0074	0.00085	0.2169
ARITH. MEAN	:	0.0018	0.00011	0.0937
ARITH. STD. DEV	:	0.0015	0.00013	0.0534
GEOM. MEAN	:	0.0015	0.00008	0.0734
GEOM. STD. DEV.	:	1.9026	1.99293	2.3843
1ST QUARTILE	:	0.0008	0.00005	0.0531
2ND QUARTILE	:	0.0013	0.00005	0.0841
3RD QUARTILE	:	0.0023	0.00010	0.1303
VOL. WGT. MEAN	:	0.0016	0.00011	0.0932

PAGE: 4

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 T			TO NOV 30,81	NOV 30,81			PAGE: 1			
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM		
		HM	UMHO/CM	ENO.	MG/L	MG/L	MG/L	MG/L		
# OF SAMPLES	:	33.0	30.0	33.00	29.0000	31.00	30.000	29.000		
MUMIXAM	:	147.0	80.0	5.13	0.1994	12.60	0.950	0.820		
MUNINUM	:	7.0	24.6	3.87	0.0582	1.95	0.220	0.050		
RANGE	•	140.0	55.4	1.26	0.1412	10.65	0.730	0.770		
ARITH. MEAN	:	63.3	39.4	4.21	0.1096	4.57	0.518	0.288		
ARITH. STD. DEV	•	41.3	12.1	0.23	0.0287	1.99	0.190	0.216		
GEOM. MEAN	:	48.8	37.8	4.20	0.1062	4.24	0.486	0.216		
GEOM. STD. DEV.	:	2.2	1.3	1.05	1.2850	1.47	1.445	2.223		
1ST QUARTILE	:	32.0	31.2	4.05	0.0881	3.13	0.350	0.120		
2ND QUARTILE	:	49.5	35.0	4.16	0.1013	4.32	0.475	0.205		
3RD QUARTILE	:	91.0	44.5	4.30	0.1260	5.47	0.645	0.400		
VOL. WGT. MEAN	:	*****	36.5	*****	0.1053	4.21	0.453	0.248		

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31,80	TO NOV 30,81		(e		PAGE: 2	
		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	24.000	29.000	29.000	25.000	25.000	31.000	27.0000
MUMIXAM	:	0.480	1.470	0.165	0.100	0.310	1.410	0.0420
MINIMUM	:	0.040	0.010	0.005	0.020	0.020	0.168	0.0030
RANGE	:	0.440	1.460	0.160	0.080	0.290	1.242	0.0390
ARITH. MEAN	:	0.152	0.643	0.061	0.044	0.096	0.548	0.0129
ARITH. STD. DEV	:	0.106	0.344	0.043	0.021	0.077	0.293	0.0100
GEOM. MEAN	:	0.124	0.515	0.041	0.040	0.068	0.483	0.0101
GEOM. STD. DEV.	:	1.897	2.471	2.828	1.569	2.399	1.664	2.0394
1ST QUARTILE	:	0.080	0.435	0.015	0.030	0.030	0.353	0.0060
2ND QUARTILE		0.130	0.560	0.065	0.040	0.075	0.470	0.0095
3RD QUARTILE	:	0.190	0.785	0.082	0.050	0.130	0.635	0.0165
VOL. WGT. MEAN	:	0.124	0.575	0.051	0.044	0.074	0.491	0.0155

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO NOV 30,81 PAGE : 3

		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	24.0000	24.0000	22.000	24.0000	26.0000	26.0000	23.000
MAXIHUM	:	0.0090	0.0220	0.060	0.2970	0.0320	0.0010	0.219
MINIHUM	:	0.0005	0.0005	0.001	0.0204	0.0010	0.0010	0.003
RANGE	:	0.0085	0.0215	0.059	0.2766	0.0310	0.0000	0.216
ARITH. MEAN	:	0.0036	0.0059	0.016	0.1006	0.0102	0.0010	0.052
ARITH. STD. DEV	:	0.0025	0.0064	0.013	0.0816	0.0080	0.0000	0.055
GEOM. MEAN	•	0.0028	0.0033	0.012	0.0756	0.0080	0.0010	0.032
GEOM. STD. DEV.	:	2.1507	3.2387	2.244	2.1639	2.0894	1.0000	2.784
1ST QUARTILE	:	0.0020	0.0020	0.007	0.0413	0.0055	0.0010	0.017
2ND QUARTILE	:	0.0025	0.0035	0.014	0.0713	0.0070	0.0010	0.025
3RD QUARTILE	:	0.0050	0.0070	0.017	0.1415	0.0120	0.0010	0.076
VOL. WGT. MEAN	•	0.0035	0.0067	0.013	0.0849	0.0106	0.0010	0.046

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	: DEC 31,80	TO NOV 30,81	PAGE : 2

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINOMMA	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES	:	9.000	9.000	10.000	8.000	9.000	10.000	9.0000
MAXIMUM	:	0.480	1.470	0.165	0.070	0.310	1.410	0.0420
MINIMUM	:	0.040	0.340	0.005	0.030	0.020	0.316	0.0030
RANGE	:	0.440	1.130	0.160	0.040	0.290	1.094	0.0390
ARITH. MEAN	:	0.170	0.762	0.067	0.045	0.112	0.691	0.0190
ARITH. STD. DEV	:	0.133	0.328	0.050	0.017	0.095	0.357	0.0137
GEOM. MEAN	:	0.134	0.705	0.045	0.042	0.078	0.619	0.0143
GEOM. STD. DEV.	:	2.064	1.522	3.044	1.430	2.636	1.622	2.3785
1ST QUARTILE	:	0.085	0.525	0.015	0.030	0.030	0.405	0.0085
2ND QUARTILE	:	0.110	0.680	0.075	0.040	0.080	0.585	0.0150
3RD QUARTILE	:	0.190	0.840	0.087	0.060	0.135	0.775	0.0195
VOL. WGT. MEAN	:	0.136	0.691	0.058	0.047	0.089	0.604	0.0224

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

		COPPER	CADMIUM	FREE H+ LAB
		MG/L	MG/L	MG/L
# OF SAMPLES	:	23.0000	24.00000	33.0000
MAXIMUM	:	0.0427	0.00120	0.1349
MUNIMUM	:	0.0018	0.00005	0.0074
RANGE	:	0.0409	0.00115	0.1275
ARITH. MEAN	:	0.0119	0.00039	0.0687
ARITH. STD. DEV	•	0.0108	0.00030	0.0275
GEOM. MEAN	:	0.0088	0.00028	0.0619
GEOM. STD. DEV.	:	2.1872	2.31950	1.6977
1ST QUARTILE	:	0.0053	0.00015	0.0484
2ND QUARTILE	:	0.0075	0.00035	0.0640
3RD QUARTILE	•	0.0138	0.00055	0.0862
VOL. WGT. MEAN	:	0.0124	0.00041	0.0681

PAGE : 4

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5.82 TO JAN 5.83

							11/2	
PERIOD OF REPORT	:	JAN 5,82	TO JAN 5,83				PAGE: 1	
		PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM
		ММ	UMHO/CM		MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	39.0	36.0	38.00	35.0000	37.00	37.000	36.000
MUMIXAM	:	140.0	70.0	5.51	0.1574	14.10	1.200	0.740
MUNINUM	:	8.0	8.0	3.76	0.0326	1.10	0.140	0.040
RANGE	:	132.0	62.0	1.75	0.1248	13.00	1.060	0.700
ARITH. MEAN	:	55.0	36.5	4.21	0.0951	3.91	0.556	0.234
ARITH. STD. DEV	:	36.1	14.1	0.32	0.0282	2.34	0.234	0.170
GEOM. MEAN	:	44.5	33.3	4.20	0.0904	3.41	0.503	0.185
GEOM. STD. DEV.	:	2.0	1.6	1.07	1.4054	1.69	1.629	2.026
1ST QUARTILE	:	25.0	29.6	4.05	0.0754	2.55	0.425	0.110
2ND QUARTILE	:	43.5	37.6	4.14	0.0965	3.43	0.500	0.175
3RD QUARTILE	:	70.1	42.4	4.26	0.1088	4.47	0.700	0.320
VOL. WGT. MEAN	:	****	33.2	*****	0.0913	3.37	0.498	0.190

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,82 TO JAN 5,83 PAGE : 2

		CHLORIDE	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
		MG/L	MG/L	MG/L	MG/L	MG/L	HG/L	MG/L
# OF SAMPLES	:	31.000	32.000	36.000	32.000	31.000	35.000	30.0000
MUMIXAM	:	0.740	1.800	0.150	0.110	0.385	0.940	0.0450
MINIMUM	:	0.020	0.160	0.005	0.000	0.005	0.050	0.0005
RANGE	:	0.720	1.640	0.145	0.110	0.380	0.890	0.0445
ARITH. MEAN	:	0.176	0.583	0.045	0.044	0.090	0.442	0.0115
ARITH. STD. DEV	:	0.150	0.382	0.035	0.032	0.090	0.215	0.0110
GEOM. MEAN	:	0.130	0.493	0.032	0.032	0.056	0.386	0.0072
GEOM. STD. DEV.	:	2.288	1.766	2.531	3.274	2.948	1.789	3.0941
1ST QUARTILE	:	0.065	0.350	0.025	0.020	0.030	0.309	0.0050
2ND QUARTILE	4	0.140	0.485	0.037	0.042	0.067	0.392	0.0085
3RD QUARTILE	:	0.190	0.645	0.067	0.067	0.100	0.520	0.0140
VOL. WGT. MEAN	:	0.156	0.489	0.033	0.035	0.080	0.404	0.0100

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT	: JAN	5,82	TO	JAN	5,83		PAGE	:	3	
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		MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	33.0000	33.0000	33.000	33.0000	34.0000	33.0000	34.000
MAXIMUM	:	0.0100	0.0210	0.035	0.2070	0.0260	0.0020	0.175
MINIHUM	:	0.0010	0.0005	0.001	0.0070	0.0005	0.0010	0.003
RANGE	:	0.0090	0.0205	0.034	0.2000	0.0255	0.0010	0.172
ARITH. MEAN	:	0.0034	0.0022	0.010	0.0673	0.0095	0.0011	0.053
ARITH. STD. DEV	:	0.0024	0.0040	0.008	0.0538	0.0052	0.0002	0.045
GEOM. MEAN	:	0.0026	0.0011	0.007	0.0469	0.0080	0.0010	0.032
GEOM. STD. DEV.	:	2.0539	2.8464	2.282	2.5212	1.9631	1.1829	3.209
1ST QUARTILE	*	0.0015	0.0005	0.004	0.0201	0.0060	0.0010	0.011
2ND QUARTILE	2	0.0025	0.0005	0.008	0.0474	0.0085	0.0010	0.045
3RD QUARTILE	:	0.0050	0.0015	0.011	0.0891	0.0115	0.0010	0.080
VOL. WGT. MEAN	•	0.0025	0.0019	0.007	0.0476	0.0088	0.0010	0.035

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

PAGE : 4

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF	REPORT	: JA	V 5.82	TO	JAN	5,83
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	13 <b>%</b> 3	COPPER MG/L	CADHIUM MG/L	FREE H+ LAB MG/L
# OF SAMPLES	:	33.0000	34.00000	38.0000
MUMIXAM	:	0.0467	0.00090	0.1738
MINIMUM	:	0.0007	0.00005	0.0031
RANGE	:	0.0460	0.00085	0.1707
ARITH. MEAN	:	0.0052	0.00016	0.0730
ARITH. STD. DEV	:	0.0080	0.00018	0.0343
GEOM. MEAN	:	0.0031	0.00011	0.0617
GEOM. STD. DEV.	:	2.6364	2.27492	2.0756
1ST QUARTILE	:	0.0013	0.00005	0.0543
2ND QUARTILE	:	0.0032	0.00010	0.0716
3RD QUARTILE	:	0.0067	0.00020	0.0871
VOL. WGT. MEAN	:	0.0049	0.00016	0.0689

# PART V SUMMARY STATISTICS OF WET DEPOSITION BY STATION

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MM	MG/M**2	MG/H××2	MG/M**2	MG/M×*2	MG/M**2	NG/M**2
# OF SAMPLES	•	11.0	11.0000	10.0000	10.00	10.000	10.000	10.000
MAXIMUM	:	188.8	16.4438	21.2211	812.50	92.500	83.070	45.440
MININUM		14.1	1.6462	3.3198	136.95	19.140	11.880	6.894
RANGE	•	174.7	14.7976	17.9013	675.55	73.360	71.190	38.546
ARITH. MEAN		78.8	6.1246	9.4902	420.06	53.081	36.297	18.135
ARITH. STD. DEV	•	48.5	5.3572	6.3799	232.72	23.531	21.397	10.961
GEOM. MEAN	:	64.9	4.3405	7.7922	364.58	48.302	31.270	15.729
GEOM. STD. DEV.	:	2.0	2.3813	1.9320	1.77	1.603	1.790	1.750
1ST QUARTILE		36.1	1.8076	4.1552	243.66	36.491	20.752	9.129
2ND QUARTILE	:	73.1	3.5493	7.3996	335.80	46.032	30.364	17.127
3RD QUARTILE	7.00	93.0	8.6799	12.1567	524.60	62.760	38.356	18.202

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT	;	DEC 31, 80	TO NOV 30,81				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MHONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M××2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	10.000	10.000	9.000	9.000	10.000	9.0000	10.0000
MAXIMUM	:	130.900	23.075	8.426	8.624	93.750	1.5660	1.5620
MUNIMUM	:	29.040	2.970	0.660	1.090	24.420	0.0990	0.1320
RANGE	;	101.860	20.105	7.766	7.534	69.330	1.4670	1.4300
ARITH. MEAN	:	65.969	9.548	3.059	3.702	53.698	0.7652	0.5233
ARITH. STD. DEV	:	32.069	6.323	2.742	2.513	24.607	0.4951	0.4144
GEOM. MEAN	:	59.856	7.984	2.045	2.965	48.804	0.5691	0.4204
GEOM. STD. DEV.	:	1.582	1.868	2.688	2.073	1.588	2.5493	1.9674
1ST QUARTILE	:	42.866	4.938	0.747	1.391	32.616	0.2484	0.2653
2ND QUARTILE	:	55.409	7.472	1.976	3.043	42.816	0.7606	0.4105
3RD QUARTILE	:	72.241	10.551	3.375	4.286	71.443	0.9985	0.4672

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	MUIDANAV	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	HG/M**2	MG/M××2
# OF SAMPLES	32	10.0000	10.000	9.0000	10.0000	10.000	10.000	9.0000
MUNIXAM	:	0.1420	2.677	6.5073	1.5104	0.189	35.784	1.4739
MUNIMIM	*	0.0290	0.338	0.7260	0.4596	0.033	0.746	0.0515
RANGE	•	0.1130	2.339	5.7813	1.0508	0.156	35.038	1.4224
ARITH. MEAN	•	0.0608	1.036	4.0959	0.8785	0.085	6.580	0.3527
ARITH. STD. DEV	:	0.0356	0.649	2.0797	0.3908	0.046	10.437	0.4581
GEON. MEAN	:	0.0534	0.894	3.4134	0.8024	0.076	3.503	0.1991
GEOM. STD. DEV.	3	1.6757	1.757	2.0799	1.5693	1.679	2.919	2.9735
1ST QUARTILE	:	0.0353	0.592	2.1989	0.4992	0.049	1.451	0.0919
2ND QUARTILE	į	0.0465	0.944	4.0275	0.7715	0.076	3.487	0.1509
3RD QUARTILE	:	0.0704	0.986	5.4759	1.1485	0.093	5.606	0.2593

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 9.00000

MAXIMUM : 0.02500

MINIMUM : 0.00376

RANGE : 0.02124

ARITH. MEAN : 0.01061

ARITH. STD. DEV : 0.00677

GEOM. MEAN : 0.00888

GEOM. STD. DEV. : 1.90195

1ST QUARTILE : 0.00464

2ND QUARTILE : 0.00864

3RD QUARTILE : 0.01240

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		нн	MG/II××2	MG/H××2	MG/H**2	MG/M**2	HG/M**2	MG/M**2
# OF SAMPLES	:	13.0	12.0000	13.0000	13.00	13.000	13.000	11.000
MAXINUM	•	131.0	11.0996	22.1652	641.90	89.080	62.080	26.942
MUNINUM	:	27.0	0.0667	1.1410	129.15	21.595	10.489	4.900
RANGE	:	104.0	11.0329	21.0242	512.75	67.485	51.591	22.042
ARITH. MEAN	:	61.4	4.0767	6.6384	277.09	39.554	30.094	15.161
ARITH. STD. DEV	:	29.3	3.6553	5.5909	143.50	19.208	15.791	7.762
GEOM. MEAN	:	55.8	1.9042	4.9433	249.53	36.120	26.537	13.226
GEOM. STD. DEV.	:	1.6	5.6380	2.2867	1.59	1.534	1.690	1.771
1ST QUARTILE	•	38.0	1.1748	3.0345	176.37	24.855	17.933	7.440
2ND QUARTILE	į	57.0	3.5803	5.1413	194.83	31.540	21.795	13.505
3RD QUARTILE	:	64.1	6.2804	7.2144	324.60	45.080	38.870	21.130

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT		: JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINOMMA	PHOSPHOR	MANGANSE
		MG/M××2	MG/M××2	MG/M××2	MG/M**2	AS N MG/M**2	MG/M**2	MG/H**2
# OF SAMPLES	:	10.000	12.000	13.000	11.000	13.000	8.0000	10.0000
MUMIXAM	:	72.050	16.640	5.240	11.960	66.810	1.0635	1.1520
MUNINUM	:	4.860	3.085	0.154	0.530	10.824	0.0280	0.0308
RANGE	:	67.190	13.555	5.086	11.430	55.986	1.0355	1.1211
ARITH. MEAN	:	39.524	7.060	3.032	4.551	35.150	0.3683	0.3600
ARITH. STD. DEV	:	17.773	4.024	1.668	4.025	14.529	0.4091	0.3128
GEOM. MEAN	:	_33.627	6.210	2.358	3.117	32.187	0.1989	0.2587
GEOM. STD. DEV.	:	2.081	1.672	2.550	2.592	1.583	3.5219	2.5648
1ST QUARTILE	:	30.833	4.322	1.796	1.582	24.750	0.0857	0.1771
2ND QUARTILE	:	37.885	5.591	2.495	2.210	30.135	0.2014	0.2643
3RD QUARTILE	:	46.130	9.457	4.375	6.167	43.600	0.6402	0.3930

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

0.453

0.802

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

2ND QUARTILE

3RD QUARTILE

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

0.0314

0.0382

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M××2	MG/M**2	MG/M**2	MG/M××2	MG/M**2	HG/H**2
# OF SAMPLES	ŧ	11.0000	10.000	10.0000	11.0000	10.000	10.000	11.0000
MAXIMUM	•	0.0655	1.222	9.0240	0.9170	0.131	7.552	0.1510
MINIMUM	ï	0.0135	0.157	1.1291	0.2430	0.027	1.006	0.0369
RANGE	:	0.0520	1.065	7.8949	0.6740	0.104	6.546	0.1142
ARITH. MEAN	:	0.0341	0.593	3.0929	0.5144	0.067	2.771	0.0769
ARITH. STD. DEV	ě	0.0149	0.340	2.3254	0.1907	0.031	2.217	0.0391
GEOM. MEAN	:	0.0312	0.505	2.5431	0.4837	0.061	2.170	0.0686
GEOM. STD. DEV.	:	1.5647	1.858	1.8805	1.4498	1.588	2.033	1.6510
1ST QUARTILE		0.0217	0.338	1.4360	0.3523	0.043	1.091	0.0413

2.7146

3.3701

0.4756

0.5745

0.063

0.067

PAGE: 3

1.944

3.000

0.0575

0.1002

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BINBROOK/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 11.00000

MAXIMUM : 0.01040

MINIMUM : 0.00205

RANGE : 0.00835

ARITH. MEAN : 0.00482

ARITH. STD. DEV : 0.00255

GEOM. MEAN : 0.00428

GEOM. STD. DEV. : 1.66177

1ST QUARTILE : 0.00275

2ND QUARTILE : 0.00337

3RD QUARTILE : 0.00647

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		нн	MG/H**2	MG/M××2	MG/H**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	11.0	11.0000	10.0000	11.00	11.000	11.000	10.000
MUNIXAM	:	146.0	10.3385	14.5696	556.80	77.720	31.320	16.240
MINIMUM	:	14.0	0.8244	2.7404	46.20	13.300	3.100	3.360
RANGE	•	132.0	9.5141	11.8292	510.60	64.420	28.220	12.880
ARITH. MEAN	:	63.5	4.3012	6.9916	220.70	29.539	12.336	8.877
ARITH. STD. DEV	:	41.4	2.9163	4.1560	152.50	19.352	8.966	4.236
GEOM. MEAN	•	51.8	3.4069	6.0181	179.72	25.404	9.459	7.996
GEOM. STD. DEV.	•	2.0	2.1340	1.7746	1.98	1.724	2.207	1.630
1ST QUARTILE	:	32.5	1.5679	3.6052	120.92	15.760	4.210	5.800
2ND QUARTILE	:	41.5	3.4221	5.3936	159.00	20.855	8.660	7.460
3RD QUARTILE	:	89.0	5.3121	8.0480	269.05	33.320	17.880	11.135

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MULHOHHA	PHOSPHOR	MANGANSE
		MG/II**2	MG/M××2	MG/M**2	MG/M×*2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	11.000	11.000	10.000	10.000	11.000	11.0000	8.0000
MUMIXAM	:	71.920	9.280	5.800	9.300	69.600	3.3580	0.5040
MINIMUM	*	8.120	0.620	0.820	1.680	5.040	0.0840	0.0330
RANGE	:	63.800	8.660	4.980	7.620	64.560	3.2740	0.4710
ARITH. MEAN	:	30.035	2.659	2.780	4.769	25.006	0.7673	0.1839
ARITH. STD. DEV	:	21.067	2.415	1.794	2.463	19.801	0.9740	0.1896
GEOM. MEAN	:	24.545	1.975	2.223	4.211	19.277	0.4456	0.1188
GEOM. STD. DEV.	:	1.930	2.229	2.090	1.709	2.131	2.8667	2.6607
1ST QUARTILE	:	16.105	0.785	1.040	2.720	11.382	0.1920	0.0630
2ND QUARTILE	:	19.780	2.080	2.670	4.080	15.876	0.3480	0.0880
3RD QUARTILE	:	38.010	3.060	3.890	5.895	32.265	0.7140	0.3160

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81 PAGE : 3

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/11**2	HG/H××2	MG/M××2	MG/11**2	MG/M××2	MG/N**2	MG/M××2
# OF SAMPLES	•	10.0000	9.000	9.0000	10.0000	10.000	8.000	9.0000
MUNIXAM	•	0.9280	1.930	12.6840	1.1760	0.146	7.266	0.9408
MINIMUM	:	0.0160	0.309	2.1338	0.1320	0.032	0.626	0.1331
RANGE	:	0.9120	1.621	10.5502	1.0440	0.114	6.640	0.8077
ARITH. MEAN	•	0.2355	1.196	5.6769	0.4964	0.068	2.737	0.4250
ARITH. STD. DEV	;	0.2821	0.658	3.8111	0.3412	0.040	2.707	0.2576
GEOM. MEAN	:	0.1333	0.994	4.6705	0.4044	0.059	1.824	0.3636
GEOM. STD. DEV.	•	3.1679	2.013	1.9298	1.9667	1.762	2.554	1.8157
1ST QUARTILE	:	0.0705	0.491	2.6734	0.2600	0.033	0.984	0.2393
2ND QUARTILE	:	0.1080	1.113	3.4962	0.3310	0.052	1.189	0.3455
3RD QUARTILE	:	0.2340	1.719	7.1420	0.6520	0.089	4.827	0.4249

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 10.00000

MAXIMUM : 0.04200

MINIMUM : 0.00580

RANGE : 0.03620

ARITH. MEAN : 0.02090

ARITH. STD. DEV : 0.01365

GEOM. MEAN : 0.01648

GEOM. STD. DEV. : 2.15677

1ST QUARTILE : 0.00650

2ND QUARTILE : 0.01960

3RD QUARTILE : 0.02940

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 5,83		888		PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
		. мм	MG/H**2	MG/H**2	MG/M×*2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	•	13.0	13.0000	13.0000	13.00	13.000	13.000	12.000
MAXIHUM	:	140.0	11.6876	14.1930	494.00	83.655	30.720	39.294
MINIMUM	:	19.0	0.9726	1.8700	27.50	7.750	1.000	1.460
RANGE	:	121.0	10.7150	12.3230	466.50	75.905	29.720	37.834
ARITH. MEAN	•	56.4	4.2418	5.5303	188.66	30.311	11.098	12.277
ARITH. STD. DEV		41.9	3.4203	4.0289	133.31	24.893	8.166	12.844
GEOM. MEAN	•	44.2	3.2291	4.4050	145.01	22.536	8.303	7.356
GEOM. STD. DEV.		2.1	2.1510	2.0034	2.26	2.225	2.414	2.993
1ST QUARTILE	:	22.9	1.6334	2.3107	91.63	10.877	5.050	3.420
2ND QUARTILE	•	33.5	3.1606	3.8401	139.70	18.600	7.695	7.980
3RD QUARTILE	:	68.5	4.5249	6.3066	229.50	35.380	13.903	15.315

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	: .	JAN 5, 82	TO JAN 5,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINOMMA	PHOSPHOR	MANGANSE
		MG/M**2	MG/H**2	MG/M×*2	MG/M**2	AS N MG/H**2	MG/M**2	MG/M**2
# OF SAMPLES	•	12.000	13.000	12.000	12.000	13.000	12.0000	13.0000
MUMIXAM	:	51.480	4.275	4.745	20.443	57.000	1.4157	0.3840
MUNIMUM	:	5.280	0.250	0.322	0.460	4.224	0.0220	0.0250
RANGE	:	46.200	4.025	4.423	19.983	52.776	1.3937	0.3590
ARITH. MEAN	:	23.566	1.813	1.720	6.205	22.470	0.4211	0.1331
ARITH. STD. DEV	:	15.514	1.295	1.409	7.276	16.008	0.4201	0.0900
GEOM. MEAN	:	18.770	1.358	1.297	2.959	17.378	0.2497	0.1097
GEOM. STD. DEV.	;	2.115	2.339	2.210	3.825	2.210	3.2584	1.9523
1ST QUARTILE	;	12.729	0.680	0.806	0.922	10.319	0.1195	0.0687
2ND QUARTILE	:	20.250	1.372	1.290	2.718	18.305	0.2760	0.1118
3RD QUARTILE	:	30.529	2.502	1.982	9.250	24.745	0.6040	0.1526

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURNASH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 5,83				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M××2	MG/M**2	MG/M**2	MG/M**2	MG/M××2	MG/M××2
# OF SAMPLES	:	13.0000	13.000	13.0000	13.0000	12.000	13.000	13.0000
MUNIXAM		0.1760	1.365	5.8816	1.2870	0.129	8.576	0.2160
MININUM	:	0.0114	0.127	0.9744	0.1500	0.022	0.276	0.0362
RANGE		0.1646	1.238	4.9072	1.1370	0.107	8.300	0.1798
ARITH. MEAN	:	0.0493	0.490	2.6129	0.4773	0.051	2.019	0.1265
ARITH. STD. DEV	:	0.0464	0.358	1.4844	0.3524	0.034	2.130	0.0598
GEOM. MEAN	•	0.0338	0.384	2.2752	0.3822	0.043	1.365	0.1110
GEOM. STD. DEV.	•	2.4824	2.078	1.7204	1.9726	1.849	2.561	1.7669
1ST QUARTILE	•	0.0125	0.191	1.5829	0.2045	0.024	0.735	0.0643
2ND QUARTILE	:	0.0293	0.341	2.0405	0.3255	0.040	1.459	0.1189
3RD QUARTILE	:	0.0672	0.608	3.0198	0.5426	0.068	2.215	0.1612

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BURWASH/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 5,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 13.00000

MAXIMUM : 0.05148

MINIMUM : 0.00110

RANGE : 0.05038

ARITH. MEAN : 0.00866

ARITH. STD. DEV : 0.01338

GEOM. MEAN : 0.00466

GEOM. STD. DEV. : 2.92160

1ST QUARTILE : 0.00209

2ND QUARTILE : 0.00420

3RD QUARTILE : 0.00770

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	1	DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/M**2	HG/M××2	HG/H**2	MG/M**2	NG/M**2	MG/M**2
# OF SAMPLES		11.0	11.0000	10.0000	10.00	10.000	10.000	10.000
MUNIXAM	:	108.0	11.8420	16.3944	815.40	84.240	35.616	20.646
MINIMUM	:	23.0	1.1283	2.4740	144.17	19.750	8.690	4.000
RANGE	•	85.0	10.7137	13.9204	671.22	64.490	26.926	16.646
ARITH. MEAN	:	66.3	4.8995	7.9057	366.91	46.940	22.045	13.597
ARITH. STD. DEV		28.9	3.0837	3.8401	188.81	16.580	9.129	5.803
GEOM. MEAN		59.7	3.9629	7.0499	328.34	44.297	20.240	12.205
GEOM. STD. DEV.	•	1.7	2.0862	1.6965	1.65	1.447	1.569	1.699
1ST QUARTILE		35.6	1.7665	4.7553	208.66	37.631	15.157	8.152
2ND QUARTILE	:	60.8	4.2384	7.6831	385.39	45.100	18.165	14.358
3RD QUARTILE	•	86.6	6.4783	9.1524	409.79	51.810	29.646	18.078

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/H××2	MG/H**2	MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	10.000	10.000	10.000	10.000	10.000	10.0000	10.0000
MUNIXAM	:	110.160	9.858	5.328	8.610	109.080	1.7160	0.3432
MINIMUM	:	33.575	1.777	0.861	1.080	26.465	0.1975	0.0318
RANGE	:	76.585	8.081	4.467	7.530	82.615	1.5185	0.3114
ARITH. MEAN	:	71.070	5.451	2.569	4.268	61.235	1.0259	0.2199
ARITH. STD. DEV	:	21.921	3.100	1.721	3.220	22.816	0.4648	0.1047
GEOM. MEAN	:	67.785	4.644	2.064	3.127	57.349	0.8831	0.1835
GEOM. STD. DEV.	:	1.399	1.843	2.038	2.373	1.480	1.9409	2.1201
1ST QUARTILE	:	52.973	2.737	0.977	1.255	41.605	0.5511	0.1256
2ND QUARTILE	:	70.955	4.130	2.235	2.740	61.854	1.1450	0.2275
3RD QUARTILE	:	77.130	8.109	3.336	7.518	68.343	1.3105	0.2925

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

GEOM. STD. DEV. :

:

:

1ST QUARTILE

2ND QUARTILE

3RD QUARTILE

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

1.5839

0.0255

0.0433

0.0520

1.268

0.434

0.625

0.694

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/H**2	MG/M**2	MG/M**2	MG/M××2	MG/M**2	MG/M**2	MG/M××2
# OF SAMPLES	:	10.0000	10.000	10.0000	10.0000	10.000	10.000	9.0000
MUNIXAM	:	0.0858	0.785	21.4500	0.8640	0.108	11.497	2.2051
MUNINUM	:	0.0197	0.415	0.6241	0.3950	0.032	0.323	0.0565
RANGE	:	0.0660	0.370	20.8259	0.4690	0.076	11.174	2.1486
ARITH. MEAN	:	0.0444	0.603	5.3691	0.5740	0.071	3.787	0.4567
ARITH. STD. DEV	:	0.0202	0.135	6.2109	0.1578	0.026	3.384	0.6784
GEOM. MEAN	:	0.0405	0.588	3.2543	0.5560	0.066	2.526	0.2459

2.8944

1.2630

3.4110

5.9382

1.2996

0.4341

0.5193

0.6297

1.520

0.043

0.076

0.087

PAGE: 3

2.809

1.395

2.495

5.279

2.9433

0.1229

0.1845

0.2951

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADITIUM

MG/M\*\*2

# OF SAMPLES : 9.00000

MAXINUM : 0.02664

MINIMUM : 0.00275

RANGE : 0.02389

ARITH. MEAN : 0.01080

ARITH. STD. DEV : 0.00826

GEOM. MEAN : 0.00831

GEOM. STD. DEV. : 2.17368

1ST QUARTILE : 0.00432

2ND QUARTILE : 0.00700

3RD QUARTILE : 0.01260

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MM	MG/M××2	MG/M××2	MG/M××2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	•	13.0	10.0000	13.0000	13.00	13.000	12.000	12.000
MAXIMUM	:	119.0	14.6665	15.2382	640.75	81.550	68.340	36.080
MINIMUM	ï	22.5	1.0284	1.6214	127.10	9.520	11.284	6.975
RANGE	;	96.5	13.6381	13.6168	513.65	72.030	57.056	29.105
ARITH. MEAN	:	65.8	6.9439	6.7014	335.50	42.297	31.606	18.029
ARITH. STD. DEV	:	30.3	4.5960	4.5462	156.02	18.329	15.210	8.393
GEOM. MEAN	:	58.9	5.3926	5.1798	303.54	37.930	28.632	16.245
GEOM. STD. DEV.	:	1.7	2.2723	2.2111	1.60	1.705	1.593	1.632
1ST QUARTILE	:	37.5	3.2583	1.9987	220.99	30.402	23.035	11.720
2ND QUARTILE	:	64.5	4.7883	5.5045	276.86	39.105	26.580	17.080
3RD QUARTILE	:	78.9	10.6093	9.0804	417.20	48.790	41.131	22.582

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/H××2	MG/M×*2	MG/H**2	MG/H**2	AS N MG/M**2	HG/H**2	MG/M**2
# OF SAMPLES	:	12.000	12.000	13.000	11.000	13.000	12.0000	13.0000
MAXIMUM	:	90.870	15.990	8.160	13.168	85.680	9.5200	1.1390
MINIMUM	•	38.600	3.627	0.201	1.020	21.730	0.3720	0.0403
RANGE	:	52.270	12.363	7.958	12.148	63.950	9.1480	1.0987
ARITH. MEAN	:	64.725	7.885	3.602	4.626	52.881	1.6044	0.3427
ARITH. STD. DEV	:	17.434	3.697	2.833	3.922	17.760	2.5526	0.2795
GEOM. MEAN	:	62.490	7.236	2.393	3.236	49.840	0.9227	0.2646
GEOM. STD. DEV.	:	1.326	1.521	2.962	2.497	1.454	2.5262	2.1841
1ST QUARTILE	:	54.266	5.422	1.320	1.235	40.341	0.4836	0.1843
2ND QUARTILE	:	61.811	6.787	2.177	2.652	51.907	0.6890	0.2710
3RD QUARTILE	:	78.605	8.786	5.015	6.741	59.860	1.6630	0.3297

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

0.492

0.707

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

2ND QUARTILE

3RD QUARTILE

:

:

0.0363

0.0496

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUHINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/H**2	MG/M××2	MG/M××2	MG/M**2
# OF SAMPLES	:	13.0000	12.000	13.0000	13.0000	13.000	12.000	13.0000
MUMIXAM	:	0.1190	1.094	15.9900	2.1420	0.119	9.380	0.1897
MUNIMUM	•	0.0112	0.292	1.5749	0.0205	0.022	1.201	0.0355
RANGE	:	0.1077	0.801	14.4151	2.1215	0.096	8.179	0.1543
ARITH. MEAN	:	0.0468	0.580	4.2150	0.4824	0.066	3.037	0.0869
ARITH. STD. DEV	:	0.0277	0.269	4.0887	0.5306	0.030	2.423	0.0399
GEOM. MEAN	:	0.0405	0.532	3.2499	0.3127	0.059	2.432	0.0794
GEOM. STD. DEV.	ŝ	1.7644	1.528	1.9441	2.9143	1.669	1.931	1.5504
1ST QUARTILE	:	0.0322	0.388	1.9108	0.2025	0.037	1.400	0.0574

3.0023

3.3741

0.3388

0.4934

0.064

0.079

PAGE: 3

2.144

3.872

0.0753

0.1011

.127

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CANBOROUGH/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/N\*\*2

# OF SAMPLES : 13.00000

MAXIMUM : 0.01240

MINIMUM : 0.00112

RANGE : 0.01127

ARITH. MEAN : 0.00672

ARITH. STD. DEV : 0.00364

GEOM. MEAN : 0.00558

GEOM. STD. DEV. : 2.03127

1ST QUARTILE : 0.00363

2ND QUARTILE : 0.00632

3RD QUARTILE : 0.00814

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/M**2	HG/H××2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	11.0	10.0000	9.0000	8.00	9.000	8.000	9.000
MUMIXAM	:	156.0	12.3915	19.5000	1060.80	134.160	134.160	41.180
MINIMUM	:	12.4	0.8983	2.8404	106.65	18.630	19.440	10.800
RANGE	:	143.6	11.4932	16.6596	954.15	115.530	114.720	30.380
ARITH. MEAN	:	75.6	6.4474	10.7473	576.47	72.989	65.283	26.948
ARITH. STD. DEV	:	49.1	3.9820	4.9188	308.57	32.676	40.046	10.954
GEOM. MEAN	•	59.5	4.9557	9.5782	482.76	65.192	54.407	24.689
GEOM. STD. DEV.	:	2.2	2.4024	1.7388	2.05	1.740	1.949	1.593
1ST QUARTILE	:	27.5	2.7416	7.9952	374.87	55.840	32.743	16.240
2ND QUARTILE	:	62.5	5.7742	9.1940	568.99	65.045	60.760	26.792
3RD QUARTILE	:	106.3	9.0479	12.0018	778.30	79.151	90.828	31.800

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/H××2	MG/M**2	MG/M**2	MG/M**2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	8.000	9.000	11.000	9.000	9.000	9.0000	9.0000
HAXINUH	:	249.600	18.565	15.300	14.686	165.360	12.7920	1.0780
MINIMUM	:	21.870	2.700	0.062	1.420	17.010	0.2700	0.1350
RANGE	:	227.730	15.865	15.238	13.266	148.350	12.5220	0.9430
ARITH. MEAN	:	116.507	11.540	6.376	6.838	88.499	4.0659	0.7743
ARITH. STD. DEV	:	70.637	5.924	4.186	5.056	47.484	3.6246	0.3496
GEOM. MEAN	i	95.589	9.785	3.865	4.993	74.460	2.7482	0.6598
GEOM. STD. DEV.	:	2.091	1.953	4.633	2.450	2.003	2.9329	2.0198
1ST QUARTILE	:	73.980	6.156	2.113	2.025	51.815	1.5846	0.4610
2ND QUARTILE	:	103.257	10.600	6.784	4.610	83.495	3.4065	0.8400
3RD QUARTILE	:	153.055	15.961	8.130	9.615	96.778	4.2893	1.0415

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M×*2	MG/I1**2	MG/H**2	MG/H××2	MG/M**2	MG/M**2
# OF SAMPLES	:	9.0000	9.000	9.0000	9.0000	9.000	9.000	8.0000
MAXIMUM	:	0.1078	1.584	23.1829	1.7160	0.156	21.190	1.0349
MINIMUM	•	0.0135	0.302	1.3446	0.3780	0.027	0.905	0.0429
RANGE	•	0.0943	1.282	21.8383	1.3380	0.129	20.285	0.9919
ARITH. MEAN	:	0.0584	1.072	10.0933	0.8532	0.088	8.886	0.3416
ARITH. STD. DEV		0.0344	0.369	7.0266	0.3610	0.045	7.218	0.3122
GEOM. MEAN	:	0.0485	0.989	7.7763	0.7959	0.077	6.354	0.2408
GEOM. STD. DEV.	:	1.9898	1.626	2.3318	1.4794	1.771	2.599	2.5610
1ST QUARTILE	:	0.0312	0.875	5.1237	0.6994	0.054	4.182	0.1610
2ND QUARTILE	:	0.0412	1.077	7.9526	0.7855	0.067	6.414	0.2257
3RD QUARTILE	:	0.0772	1.254	10.4315	0.8355	0.106	7.996	0.4409

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 8.00000

MAXINUM : 0.03290

MINIMUM : 0.00355

RANGE : 0.02935

ARITH. MEAN : 0.01422

ARITH. STD. DEV : 0.01144

GEOM. MEAN : 0.01084

GEOM. STD. DEV. : 2.19600

1ST QUARTILE : 0.00652

2ND QUARTILE : 0.01025

3RD QUARTILE : 0.02190

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	•	JAN 5, 82	TO JAN 4,83				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/M**2	MG/M**2	MG/M××2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	12.0	12.0000	12.0000	12.00	12.000	12.000	12.000
MAXIMUM	:	141.0	16.5661	18.3018	840.00	125.160	66.000	43.710
MINIMUM	3	19.0	2.0063	3.2452	91.20	22.040	10.450	7.790
RANGE	:	122.0	14.5598	15.0566	748.80	103.120	55.550	35.920
ARITH. MEAN	:	81.4	7.7922	9.7844	383.34	54.205	33.096	19.540
ARITH. STD. DEV	:	33.7	4.9758	4.8961	216.44	28.959	18.012	9.404
GEOM. MEAN	:	73.1	6.3293	8.6707	326.04	48.353	28.908	17.767
GEOM. STD. DEV.	:	1.7	2.0185	1.6941	1.87	1.631	1.740	1.576
1ST QUARTILE	:	57.0	3.7937	6.1020	229.95	34.195	24.542	16.405
2ND QUARTILE	:	81.5	6.6072	8.5481	363.52	45.075	27.319	17.593
3RD QUARTILE	:	103.7	10.9268	12.6466	508.56	65.987	40.765	20.610

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINOHHA	PHOSPHOR	MANGANSE
		MG/M××2	MG/M**2	MG/M**2	HG/M**2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	12.000	12.000	12.000	12.000	12.000	11.0000	12.0000
MUNIXAM	:	147.000	13.860	23.882	9.480	95.760	8.2715	1.3800
MINIMUM	:	14.440	1.425	0.253	1.125	8.424	0.1410	0.0505
RANGE	:	132.560	12.435	23.630	8.355	87.336	8.1305	1.3294
ARITH. MEAN	:	53.111	6.264	5.975	5.401	38.882	1.6153	0.5187
ARITH. STD. DEV	:	39.132	3.575	7.518	2.729	26.524	2.7137	0.4465
GEOM. MEAN	:	43.141	5.278	2.980	4.604	30.718	0.6101	0.3574
GEOM. STD. DEV.	:	1.926	1.920	3.653	1.911	2.130	3.8053	2.6105
1ST QUARTILE	*	27.654	3.975	1.320	2.769	20.783	0.1943	0.2018
2ND QUARTILE	:	40.125	6.066	2.880	6.009	33.150	0.4567	0.3075
3RD QUARTILE	:	65.130	7.770	6.757	7.380	55.910	0.7875	0.7857

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/M××2	MG/H**2	MG/M××2	MG/M**2
# OF SAMPLES	:	12.0000	12.000	12.0000	12.0000	12.000	11.000	12.0000
MUNIXAM	:	0.1080	2.260	22.4640	1.4100	0.141	7.920	0.6812
MINIMUM	;	0.0095	0.154	0.9014	0.2400	0.019	0.381	0.0567
RANGE	:	0.0985	2.105	21.5626	1.1700	0.122	7.539	0.6245
ARITH. MEAN	•	0.0474	0.687	5.4520	0.5468	0.086	3.041	0.2064
ARITH. STD. DEV	:	0.0251	0.536	5.9018	0.3306	0.033	2.121	0.1733
GEOM. MEAN	:	0.0410	0.563	3.7060	0.4775	0.077	2.354	0.1597
GEOM. STD. DEV.	:	1.8408	1.904	2.4278	1.6884	1.714	2.284	2.0740
1ST QUARTILE	ï	0.0337	0.405	2.0491	0.3260	0.067	1.235	0.0986
2ND QUARTILE	:	0.0449	0.583	3.2440	0.4355	0.090	2.574	0.1435
3RD QUARTILE	:	0.0557	0.757	6.5286	0.6783	0.107	3.816	0.2791

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DOG'S NEST EAST/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M××2

# OF SAMPLES : 12.00000

MAXIMUM : 0.09567

MINIMUM : 0.00225

RANGE : 0.09342

ARITH. MEAN : 0.01591

ARITH. STD. DEV : 0.02570

GEOM. MEAN : 0.00878

GEOM. STD. DEV. : 2.71324

1ST QUARTILE : 0.00544

2ND QUARTILE : 0.00732

3RD QUARTILE : 0.01590

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT : JUN 1, 81 TO NOV 30,81 PAGE : 1

		PRECIP.	FREE H+ Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/H**2	MG/M××2	MG/M**2	MG/M**2	MG/N**2	MG/M**2
# OF SAMPLES		6.0	5.0000	4.0000	6.00	6.000	3.000	6.000
MAXIMUM	:	165.0	10.4108	11.0376	1196.25	120.960	223.560	54.000
MINIMUM	:	33.0	0.7730	1.7160	168.30	20.790	49.300	11.900
RANGE	•	132.0	9.6379	9.3216	1027.95	100.170	174.260	42.100
ARITH. MEAN	:	91.3	4.9966	5.8414	636.40	69.337	110.030	26.627
ARITH. STD. DEV	1	45.1	3.5537	4.1162	439.10	44.368	98.400	15.799
GEOM. MEAN	÷	81.4	3.7415	4.6664	502.33	56.636	85.761	23.133
GEOM. SID. DEV.	:	1.7	2.6386	2.2585	2.20	2.068	2.300	1.782
1ST QUARTILE	•	46.5	2.1884	2.6280	241.40	27.855	*****	12.740
2ND QUARTILE	:	91.0	3.9320	5.3060	513.47	59.450	*****	23.640
3RD QUARTILE	•	102.5	5.0976	9.0548	907.20	100.125	*****	30.900

\*\*\*\* : INSUFFICIENT DATA

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JUN 1, 81	TO NOV 30,81				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	5.000	5.000	5.000	5.000	5.000	5.0000	5.0000
MUMIXAM	:	174.960	49.680	11.880	10.800	128.520	5.9400	2.4840
MUNINUM	:	27.060	7.225	1.700	2.550	19.800	0.8250	0.2310
RANGE	:	147.900	42.455	10.180	8.250	108.720	5.1150	2.2530
ARITH. MEAN	:	77.344	23.461	4.968	6.430	56.978	2.5590	1.0550
ARITH. STD. DEV	:	58.486	20.295	4.146	3.371	42.498	2.1127	0.9119
GEOM. MEAN	:	62.888	16.816	3.843	5.687	46.666	1.9744	0.7465
GEOM. STD. DEV.	:	2.029	2.504	2.203	1.772	2.004	2.2126	2.6502
1ST QUARTILE	:	34.780	7.735	1.840	3.700	26.475	1.0500	0.2855
2ND QUARTILE	:	50.350	9.650	2.930	4.900	38.885	1.3650	0.6200
3RD QUARTILE	:	71.100	26.077	4.640	6.975	51.710	2.3775	1.1100

# SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

ONTARIO MINISTRY OF THE ENVIRONMENT

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT	•	JUN 1, 81	TO	NOV 30,81				PAGE: 3	
		NICKEL		ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/II××2		MG/M**2	MG/M**2	MG/H××2	MG/H**2	MG/M××2	MG/M**2
# OF SAMPLES	•	6.0000		5.000	6.0000	6.0000	6.000	6.000	5.0000
MAXIMUM	•	0.5400		6.264	58.8600	3.6720	1.728	42.552	6.4692
MININUM	:	0.0165		0.868	2.5344	0.4620	0.066	1.465	0.3109
RANGE	•	0.5235		5.396	56.3256	3.2100	1.662	41.087	6.1583
ARITH. MEAN	•	0.2272		2.585	16.9330	1.7355	0.462	12.415	1.9039
ARITH. STD. DEV	:	0.1940		2.210	21.4819	1.2875	0.642	15.719	2.6205
GEOM. MEAN		0.1341		1.975	9.4313	1.3334	0.228	6.478	0.9565
GEOM. STD. DEV.		3.8073		2.241	3.1796	2.2796	3.548	3.528	3.5251
1ST QUARTILE	•	0.0295	001	0.938	3.4304	0.5705	0.075	1.877	0.3567
2ND QUARTILE	:	0.2170		1.452	8.1286	1.3975	0.198	5.991	0.4788
3RD QUARTILE	:	0.2850		2.392	15.4942	2.3325	0.397	12.085	1.1685

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT : JUN 1, 81 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 6.00000

MAXINUM : 0.08250

MINIMUM : 0.00425

RANGE : 0.07825

ARITH. MEAN : 0.03747

ARITH. STD. DEV : 0.03189

GEOM. MEAN : 0.02228

GEOM. STD. DEV. : 3.64220

1ST QUARTILE : 0.00455

2ND QUARTILE : 0.03420

3RD QUARTILE : 0.05340

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,			TO JA	N 4,83			PAGE : 1				
		PRECIP.	FRE L	E H+ AB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE		
		ММ	, MG	/H**2	MG/M×*2	MG/M**2	MG/M**2	MG/M**2	MG/M**2		
# OF SAMPLES	•	13.0	4	.0000	10.0000	10.00	10.000	2.000	6.000		
MAXIMUM		107.0	4	.5644	7.4472	814.20	87.230	167.990	56.700		
MININUM	•	20.2	0	.1085	0.6384	147.46	20.090	78.540	25.080		
RANGE	•	86.8	4	.4559	6.8088	666.74	67.140	89.450	31.620		
ARITH. MEAN	:	50.8	2	.1235	2.8058	447.73	48.173	123.265	34.598		
ARITH. STD. DEV	:	23.5	2	.1997	2.1018	246.28	21.296	63.251	12.086		
GEOM. MEAN	:	46.0	0	.9200	2.2064	387.15	43.841	114.865	33.100		
GEOM. STD. DEV.	•	1.6	5	.8897	2.0978	1.79	1.599	1.712	1.371		
1ST QUARTILE	:	32.5	0	. 2673	1.2038	246.77	26.850	****	25.120		
2ND QUARTILE	:	46.5	1	.9106	2.1934	380.61	47.722	*****	31.020		
3RD QUARTILE	:	61.0	3	. 9798	3.1232	612.32	56.360	*****	36,415		

\*\*\*\* : INSUFFICIENT DATA

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 81	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MULHOHIMA	PHOSPHOR	MANGANSE
		MG/H**2	MG/M**2	MG/M**2	MG/H××2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	•	8.000	7.000	10.000	7.000	9.000	8.0000	10.0000
MUNIXAM	:	107.250	62.563	18.260	54.035	73.645	6.5120	1.1440
MINIMUM	:	13.230	19.140	1.818	7.400	23.040	0.3780	0.2520
RANGE	:	94.020	43.423	16.442	46.635	50.605	6.1340	0.8920
ARITH. MEAN	:	57.189	35.729	7.497	20.629	43.799	1.9836	0.5923
ARITH. STD. DEV	;	34.038	16.302	5.409	16.656	22.367	2.0147	0.2970
GEOM. MEAN	:	47.446	32.755	5.791	16.217	39.034	1.3550	0.5290
GEOM. STD. DEV.	:	2.008	1.565	2.198	2.067	1.658	2.5088	1.6584
1ST QUARTILE	:	32.780	20.370	2.670	7.825	23.785	0.6928	0.3460
2ND QUARTILE	:	46.161	28.595	6.030	11.852	30.617	1.3205	0.5001
3RD QUARTILE	:	89.575	44.805	9.926	25.505	57.770	2.4760	0.6965

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPOR	т :	DEC 31, 81	TO JAN 4,83				PAGE : 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M××2	MG/M××2	MG/M**2	MG/M×*2	HG/M**2	MG/M**2
# OF SAMPLES	:	10.0000	10.000	10.0000	10.0000	10.000	10.000	10.0000
MUNIXAM	:	0.0720	3.564	15.9120	2.7730	0.490	16.296	1.5620
MINIMUM	1	0.0185	0.619	4.5262	0.1855	0.059	3.551	0.1445
RANGE	•	0.0535	2.945	11.3858	2.5875	0.431	12.745	1.4175
ARITH. MEAN	:	0.0534	1.905	10.2605	0.8999	0.200	7.589	0.6993
ARITH. STD. DEV	:	0.0168	0.912	4.0373	0.7790	0.131	3.808	0.4685
GEOM. MEAN	:	0.0501	1.716	9.4854	0.6500	0.165	6.827	0.5523
GEOM. STD. DEV.	:	1.5078	1.639	1.5402	2.4003	1.929	1.622	2.1691
1ST QUARTILE	:	0.0405	1.385	6.1346	0.2360	0.091	3.992	0.3173
2ND QUARTILE	:	0.0562	1.591	9.7620	0.7817	0.166	7.474	0.6009
3RD QUARTILE	:	0.0645	1.995	13.4735	0.9775	0.253	8.993	0.8032

STATION NAME : GERMAIN PARK/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 81 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 10.00000

MAXIMUM : 0.02860

MINIMUM : 0.00186

RANGE : 0.02674

ARITH. MEAN : 0.01393

ARITH. STD. DEV : 0.00902

GEOM. MEAN : 0.01037

GEOM. STD. DEV. : 2.55879

1ST QUARTILE : 0.00600

2ND QUARTILE : 0.01155

3RD QUARTILE : 0.01830

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80			TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/M**2	MG/M**2	HG/H**2	MG/M×*2	MG/M**2	MG/M**2
# OF SAMPLES	:	11.0	11.0000	9.0000	10.00	9.000	8.000	5.000
MUNIXAM	:	138.0	11.0223	14.4768	681.60	53.760	44.160	13.440
MINIMUM	:	7.0	0.6533	1.9760	36.05	15.200	3.920	4.250
RANGE	:	131.0	10.3690	12.5008	645.55	38.560	40.240	9.190
ARITH. MEAN	•	54.8	4.2081	7.3516	283.31	28.499	18.913	9.282
ARITH. STD. DEV	•	42.4	3.3017	4.1478	197.25	12.555	15.389	4.193
GEOM. MEAN	:	39.1	2.9887	6.2622	217.32	26.385	14.376	8.393
GEOM. STD. DEV.	:	2.5	2.5568	1.8792	2.33	1.502	2.214	1.693
1ST QUARTILE	:	18.5	0.9359	3.9232	132.70	19.285	10.407	4.805
2ND QUARTILE	:	32.3	2.8862	6.3715	221.62	23.289	11.885	8.200
3RD QUARTILE	3	86.5	5.7636	8.2546	377.95	29.630	29.320	11.680

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT	3	DEC 31, 80	TO NOV 30,81				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINOMHA	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/N**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	;	9.000	8.000	7.000	6.000	10.000	7.0000	6.0000
MAXIMUM	:	97.920	9.600	7.920	11.040	51.840	2.2080	0.7920
MININUM	:	0.670	0.420	0.840	1.340	3.920	0.1680	0.1400
RANGE	:	97.250	9.180	7.080	9.700	47.920	2.0400	0.6520
ARITH. MEAN	:	35.342	3.608	3.070	4.807	26.817	0.6455	0.4470
ARITH. STD. DEV	:	28.975	3.145	2.657	3.560	16.597	0.7107	0.2933
GEOM. MEAN	:	21.589	2.416	2.265	3.760	21.338	0.4476	0.3590
GEOM. STD. DEV.	:	4.131	2.868	2.302	2.214	2.206	2.3648	2.1359
1ST QUARTILE	:	19.232	1.626	0.920	1.520	13.286	0.1840	0.1550
2ND QUARTILE	:	23.580	2.790	1.765	4.300	20.700	0.3657	0.4060
3RD QUARTILE	:	37.260	5.007	4.100	5.480	39.420	0.6055	0.6520

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/N**2	MG/M**2	MG/M**2	MG/N**2
# OF SAMPLES	:	5.0000	5.000	6.0000	6.0000	6.000	6.000	5.0000
HUNIXAH	:	2.0160	2.354	27.7440	1.1520	0.138	17.472	2.9760
MINIMUM		0.0335	0.766	2.9325	0.0670	0.028	0.462	0.4837
RANGE	:	1.9825	1.588	24.8115	1.0850	0.110	17.010	2.4923
ARITH. MEAN	•	0.6481	1.280	8.6546	0.6582	0.084	5.787	1.1635
ARITH. STD. DEV		0.7812	0.668	9.5507	0.4154	0.036	6.696	1.0446
GEOM. MEAN	:	0.3344	1.162	6.0930	0.4784	0.076	2.610	0.9048
GEOM. STD. DEV.	•	4.3431	1.613	2.2931	2.8952	1.716	4.543	2.0946
1ST QUARTILE	:	0.1927	0.772	3.1774	0.2035	0.047	0.578	0.5270
2ND QUARTILE	:	0.3830	0.895	4.7563	0.7120	0.086	3.513	0.6094
3RD QUARTILE	:	0.4195	1.250	6.8983	0.9310	0.092	7.527	0.8938

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 5.00000

MAXIMUM : 0.11040

MINIMUM : 0.01340

RANGE : 0.09700

ARITH. MEAN : 0.04452

ARITH. STD. DEV : 0.03803

GEOM. MEAN : 0.03479

GEOM. STD. DEV. : 2.14524

1ST QUARTILE : 0.01990

2ND QUARTILE : 0.03020

3RD QUARTILE : 0.03620

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83 PAGE : 1

		PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
		ММ	LAB MG/M**2	TO PH8.3 MG/M**2	MG/M××2	AS N MG/H**2	MG/M**2	MG/M××2
# OF SAMPLES	:	13.0	12.0000	10.0000	12.00	12.000	11.000	8.000
MUMIXAM	:	112.0	10.2610	12.3480	425.25	45.150	26.230	12.200
MINIMUM	:	16.0	0.0896	1.1040	76.85	6.380	3.190	1.410
RANGE	:	96.0	10.1714	11.2440	348.40	38.770	23.040	10.790
ARITH. MEAN	•	49.1	3.0704	4.4097	174.36	23.011	9.780	6.411
ARITH. STD. DEV	:	30.2	2.5907	3.1916	98.63	10.569	7.328	3.672
GEOM. MEAN	:	41.9	2.0348	3.5981	154.53	20.669	7.698	5.351
GEOM. STD. DEV.		1.8	3.2577	1.9641	1.64	1.667	2.057	2.009
1ST QUARTILE	:	27.0	1.6114	2.1674	108.17	16.440	3.609	3.635
2ND QUARTILE	•	37.3	2.7929	3.6794	135.88	20.715	6.760	5.971
3RD QUARTILE	:	55.0	3.3399	4.4314	223.25	29.008	13.330	9.232

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	9.000	11.000	9.000	8.000	11.000	8.0000	9.0000
MUMIXAM	:	88.480	3.224	7.840	6.405	51.520	4.1440	0.3290
MINIHUM	:	13.500	0.332	0.166	0.750	9.100	0.0525	0.0664
RANGE	1	74.980	2.892	7.674	5.655	42.420	4.0915	0.2626
ARITH. MEAN	:	37.822	1.842	2.426	3.240	23.368	1.1028	0.1808
ARITH. STD. DEV	*	27.156	0.993	2.394	2.066	13.504	1.4210	0.0966
GEOM. MEAN	:	30.111	1.495	1.411	2.577	20.200	0.5229	0.1565
GEOM. STD. DEV.	:	2.039	2.160	3.486	2.171	1.758	3.9927	1.8093
1ST QUARTILE	:	16.415	0.728	0.494	1.500	11.761	0.2386	0.0902
2ND QUARTILE	:	19.774	1.840	1.610	3.030	16.701	0.5502	0.1475
3RD QUARTILE	:	49.415	2.595	2.895	4.852	28.975	1.5242	0.2259

0.337

0.437

STATION NAME : HANMER/CUMULATIVE PRECIP.

2ND QUARTILE

3RD QUARTILE

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

0.0401

0.0542

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M××2	MG/M×*2	MG/N**2	MG/M**2	MG/11**2	MG/H××2
# OF SAMPLES	:	10.0000	9.000	10.0000	10.0000	10.000	10.000	10.0000
MUNIXAM	1 (i	0.1440	0.595	5.2643	0.8463	0.112	4.990	0.3276
MINIHUM	:	0.0201	0.189	0.7902	0.0560	0.016	0.635	0.0541
RANGE	:	0.1238	0.406	4.4741	0.7903	0.096	4.355	0.2735
ARITH. MEAN	•	0.0574	0.364	2.4946	0.4129	0.054	2.038	0.1589
ARITH. STD. DEV	:	0.0453	0.134	1.5527	0.2986	0.033	1.314	0.1111
GEOM. MEAN	•	0.0458	0.341	2.1296	0.3023	0.045	1.713	0.1269
GEOM. STD. DEV.	:	1.9619	1.476	1.7975	2.4742	1.864	1.861	2.0260
1ST QUARTILE	:	0.0270	0.236	1.5173	0.1600	0.027	0.964	0.0695
1ST QUARTILE	:	0.0270	0.236	1.5173	0.1600	0.027	0.964	0.0695

1.7857

2.7037

0.3354

0.6038

0.044

0.064

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1.825

2.179

0.0927

0.2426

STATION NAME : HANMER/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 10.00000

MAXIMUM : 0.03050

MINIMUM : 0.00235

RANGE : 0.02815

ARITH. MEAN : 0.00799

ARITH. STD. DEV : 0.00901

GEOM. MEAN : 0.00543

GEOM. STD. DEV. : 2.31643

1ST QUARTILE : 0.00270

2ND QUARTILE : 0.00464

3RD QUARTILE : 0.00600

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE	CALCIUM	CHLORIDE
		ММ	MG/M**2	MG/M**2	MG/M**2	AS N MG/M**2	HG/M**2	MG/M××2
# OF SAMPLES	:	11.0	11.0000	10.0000	10.00	10.000	10.000	9.000
MAXIMUM	•	147.0	8.4590	14.1414	632.70	59.950	82.080	22.800
MINIMUM	:	9.0	0.0667	1.8624	147.20	19.200	4.080	4.800
RANGE	•	138.0	8.3923	12.2790	485.50	40.750	78.000	18.000
ARITH. MEAN	•	71.6	4.4117	7.8922	342.10	34.910	21.802	11.137
ARITH. STD. DEV	•	42.4	2.9435	3.8791	172.30	15.233	22.136	5.744
GEOM. MEAN	•	57.6	2.7120	6.8428	302.78	31.993	16.154	9.887
GEOM. STD. DEV.	•	2.2	4.1792	1.8505	1.70	1.556	2.163	1.688
1ST QUARTILE	:	36.5	1.1556	4.3938	168.20	20.400	10.430	5.685
2ND QUARTILE	:	56.0	4.3184	7.2188	318.27	32.195	16.380	10.290
3RD QUARTILE	:	110.0	6.5580	10.6194	447.52	44.610	18.240	12.660

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,	81			PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	9.000	10.000	8.000	9.000	10.000	9.0000	10.0000
MAXIMUM	:	100.320	12.540	7.980	11.760	79.800	4.7880	0.3280
MUNINUM	:	31.200	0.735	1.530	1.220	19.680	0.1830	0.0545
RANGE		69.120	11.805	6.450	10.540	60.120	4.6050	0.2735
ARITH. MEAN	:	56.664	4.514	4.042	7.273	47.052	1.8379	0.2019
ARITH. STD. DEV	:	25.820	3.816	2.712	4.283	20.306	1.7983	0.0822
GEOM. MEAN	:	51.843	3.130	3.295	5.710	42.953	1.0545	0.1819
GEOM. STD. DEV.	:	1.557	2.617	1.987	2.296	1.587	3.3470	1.7058
1ST QUARTILE	:	35.005	1.215	1.775	3.030	28.675	0.3515	0.1310
2ND QUARTILE	:	42.390	3.320	2.885	7.025	44.485	0.8220	0.2085
3RD QUARTILE	:	68.235	5.820	6.755	10.485	58.305	2.4315	0.2360

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81 PAGE : 3

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	(98)]	MG/M××2	MG/M**2	MG/M**2	MG/M**2	MG/H**2	MG/M××2	MG/M**2
# OF SAMPLES	:	9.0000	8.000	9.0000	10.0000	10.000	9.000	9.0000
MAXIMUM	:	2.4990	1.898	14.2560	3.8220	0.147	7.008	5.4978
MINIMUM	:	0.0305	0.162	2.6291	0.1600	0.032	0.961	0.1653
RANGE	:	2.4685	1.736	11.6269	3.6620	0.115	6.047	5.3325
ARITH. MEAN	:	0.7321	0.857	5.7027	1.1941	0.078	2.881	1.4022
ARITH. STD. DEV	:	0.8442	0.517	3.8482	1.3455	0.039	1.964	1.6796
GEOM. MEAN	:	0.3125	0.708	4.8505	0.7386	0.069	2.399	0.8229
GEOM. STD. DEV.	:	4.9393	2.068	1.7747	2.7055	1.669	1.876	2.9725
1ST QUARTILE	:	0.0980	0.545	2.8707	0.4200	0.044	1.546	0.3720
2ND QUARTILE	;	0.2365	0.786	4.2870	0.5710	0.063	1.905	0.6454
3RD QUARTILE	:	0.9180	1.067	5.3431	0.9940	0.110	3.103	1.4360

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STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 9.00000

MAXIMUH : 0.17640

MINIMUM : 0.00410

RANGE : 0.17230

ARITH. MEAN : 0.03569

ARITH. STD. DEV : 0.05502

GEOM. MEAN : 0.01623

GEUM. STD. DEV. : 3.58097

1ST QUARTILE : 0.00560

2ND QUARTILE : 0.00865

3RD QUARTILE : 0.03390

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	;	JAN 5, 82	TO JAN 4,83				PAGE : 1	
		PRECIP.	FREE H+ LAB	TOTAL H+	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/M**2	MG/M××2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	13.0	13.0000	12.0000	12.00	12.000	12.000	11.000
MAXIMUM	:	121.0	11.1991	13.8960	498.00	57.000	28.120	24.864
MINIMUM	:	8.0	0.2589	0.4672	20.00	3.520	2.480	1.120
RANGE	:	113.0	10.9402	13.4288	478.00	53.480	25.640	23.744
ARITH. MEAN	:	59.6	4.0443	5.6826	202.43	30.159	11.574	9.110
ARITH. STD. DEV	3	37.3	2.7066	3.3944	125.52	16.808	6.946	6.786
GEOM. MEAN	:	47.4	3.0417	4.5159	161.43	24.818	9.694	6.715
GEOM. STD. DEV.	:	2.2	2.5608	2.3309	2.25	2.115	1.927	2.489
1ST QUARTILE	:	25.5	2.1814	4.1355	138.12	19.596	5.950	3.590
2ND QUARTILE	:	50.5	3.9639	5.2320	188.16	23.475	11.070	6.750
3RD QUARTILE	:	71.6	4.6968	7.3243	227.64	46.102	14.328	12.440

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M××2	AS N MG/M×*2	NG/M**2	MG/M**2
# OF SAMPLES	3	11.000	12.000	11.000	11.000	11.000	10.0000	11.0000
MAXIMUM	:	64.800	4.704	6.840	13.440	63.600	0.9880	0.3040
MINIMUM	:	10.720	0.520	0.000	0.520	1.250	0.1210	0.0640
RANGE	:	54.080	4.184	6.840	12.920	62.350	0.8670	0.2400
ARITH. MEAN	:	29.515	1.994	2.368	4.825	24.174	0.4784	0.1467
ARITH. STD. DEV	:	15.072	1.350	2.229	4.202	18.618	0.2687	0.0740
GEOM. MEAN	:	26.439	1.582	1.510	2.940	16.346	0.4085	0.1324
GEOM. STD. DEV.	*	1.638	2.094	3.470	3.208	3.058	1.8687	1.5917
1ST QUARTILE	:	17.912	0.975	0.182	0.722	8.110	0.2680	0.0928
2ND QUARTILE	;	26.024	1.601	2.008	3.203	19.840	0.4344	0.1201
3RD QUARTILE	:	32.941	3.020	2.650	7.500	27.773	0.5325	0.1683

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83 PAGE : 3

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M×*2	MG/M**2	MG/M**2	MG/M××2	MG/M**2	MG/M**2
# OF SAMPLES	:	10.0000	11.000	10.0000	11.0000	11.000	11.000	10.0000
MUMIXAM	:	1.5960	0.836	11.0200	1.5600	0.121	5.875	3.5492
MINIMUM	•	0.0225	0.065	0.8344	0.0560	0.008	0.226	0.0563
RANGE	:	1.5735	0.771	10.1856	1.5040	0.113	5.649	3.4929
ARITH. MEAN	;	0.2495	0.403	3.5621	0.6524	0.068	2.192	0.6251
ARITH. STD. DEV	:	0.4809	0.277	3.0983	0.5192	0.035	1.829	1.1009
GEOM. MEAN	:	0.0971	0.303	2.6570	0.4569	0.057	1.492	0.2389
GEOM. STD. DEV.	:	3.5730	2.375	2.2113	2.6672	2.123	2.719	3.7968
1ST QUARTILE	:	0.0350	0.126	1.4642	0.2370	0.042	0.592	0.0696
2ND QUARTILE	:	0.0677	0.299	2.1810	0.4223	0.058	1.396	0.1923
3RD QUARTILE	:	0.1728	0.599	4.6000	0.8899	0.091	2.947	0.2840

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LIVELY/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 11,00000

MAXIMUM : 0.06840

MINIMUM : 0.00080

RANGE : 0.06760

ARITH. MEAN : 0.01096

ARITH. STD. DEV : 0.01932

GEOM. MEAN : 0.00537

GEOM. STD. DEV. : 3.06022

1ST QUARTILE : 0.00265

2ND QUARTILE : 0.00464

3RD QUARTILE : 0.00786

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/H**2	MG/II××2	MG/M**2	MG/M××2	MG/M**2	MG/M**2
# OF SAMPLES	:	11.0	11.0000	10.0000	10.00	10.000	9.000	10.000
MUMIXAM	:	97.5	11.2078	14.4768	591.60	60.900	55.503	75.075
MINIMUM	•	13.6	1.2892	2.8940	153.00	21.600	12.570	8.640
RANGE	:	83.9	9.9185	11.5828	438.60	39.300	42.933	66.435
ARITH. MEAN	:	63.7	5.8481	8.6139	349.64	43.538	26.714	20.470
ARITH. STD. DEV	:	29.7	3.0607	3.4177	123.22	10.842	12.938	19.818
GEOM. MEAN	:	55.2	4.9335	7.8469	328.45	42.127	24.293	16.149
GEOM. STD. DEV.	:	1.9	1.9605	1.6397	1.47	1.329	1.581	1.885
1ST QUARTILE	į	34.1	2.3332	5.8685	239.41	37.151	15.767	9.730
2ND QUARTILE	:	65.5	5.8775	8.8294	376.81	42.470	24.525	13.638
3RD QUARTILE	•	87.6	7.5632	9.5279	391.17	49.474	30.025	18.671

37.107

42.547

PAGE: 2

0.5419

0.7251

0.2970

0.3835

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

5.561

7.685

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

49,970

54.732

2ND QUARTILE

3RD QUARTILE

			2 17 22				. AGE . E	•
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR	MANGANSE
		MG/N**2	MG/M**2	MG/M×*2	MG/M**2	MG/M×*2	MG/M××2	MG/M**2
# OF SAMPLES	:	10.000	10.000	10.000	10.000	10.000	9.0000	10.0000
MUMIXAM	:	73.500	11.013	7.700	6.704	51.330	1.4640	0.5286
MUNIMUM	:	27.360	2.700	0.720	0.670	21.600	0.1800	0.1080
RANGE	:	46.140	8.313	6.980	6.034	29.730	1.2840	0.4206
ARITH. MEAN	1	51.114	6.181	2.749	3.261	37.511	0.7166	0.3225
ARITH. STD. DEV	:	12.933	2.997	2.059	2.354	9.479	0.4387	0.1276
GEOM. MEAN	:	49.534	5.542	2.179	2.454	36.357	0.6036	0.2966
GEOM. STD. DEV.	:	1.313	1.646	2.067	2.309	1.310	1.9011	1.5835
1ST QUARTILE	:	42.819	3.251	1.008	1.135	29.242	0.4357	0.2270

2.562

2.947

2.055

5.419

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD .	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/M××2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	10.0000	10.000	10.0000	10.0000	10.000	10.000	9.0000
MUMIXAM	:	0.1920	1.751	12.2348	0.9570	0.097	15.922	1.9646
MINIMUM	:	0.0167	0.439	1.0368	0.3685	0.033	0.900	0.0559
RANGE	:	0.1752	1.312	11.1980	0.5885	0.064	15.022	1.9087
ARITH. MEAN	:	0.0562	0.814	5.0590	0.6220	0.069	4.556	0.4015
ARITH. STD. DEV	:	0.0526	0.436	3.6648	0.2098	0.026	4.464	0.6209
GEOM. MEAN	:	0.0419	0.728	4.0009	0.5909	0.064	3.221	0.1824
GEOM. STD. DEV.	:	2.1696	1.622	2.0957	1.4032	1.553	2.362	3.4888
1ST QUARTILE	:	0.0177	0.456	2.4639	0.4308	0.035	1.536	0.0626
2ND QUARTILE	:	0.0427	0.660	3.8618	0.5545	0.077	2.818	0.1029
3RD QUARTILE	:	0.0549	0.932	5.7022	0.7714	0.088	5.421	0.2980

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 10.00000

MAXIMUM : 0.01740

MINIMUM : 0.00173

RANGE : 0.01566

ARITH. MEAN : 0.00936

ARITH. STD. DEV : 0.00560

GEOM. MEAN : 0.00760

GEOM. STD. DEV. : 2.09407

1ST QUARTILE : 0.00460

2ND QUARTILE : 0.00852

3RD QUARTILE : 0.01330

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT	;	JAN 5, 82	TO JAN 4,83				PAGE: 1	
		PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M××2	MG/M××2
# OF SAMPLES	:	13.0	13.0000	12.0000	12.00	12.000	11.000	13.000
MUNIXAM	:	136.0	15.1771	15.8550	572.25	73.500	80.300	35.200
MINIMUM	:	23.0	0.2787	1.4464	145.20	20.328	11.298	7.650
RANGE	:	113.0	14.8984	14.4086	427.05	53.172	69.002	27.550
ARITH. MEAN	:	68.2	5.8429	7.6273	302.36	42.011	29.482	16.785
ARITH. STD. DEV	:	34.2	4.2888	4.2433	130.76	17.056	21.225	7.659
GEOM. MEAN	:	60.2	4.2888	6.5345	278.30	39.180	24.454	15.304
GEOM. STD. DEV.	:	1.7	2.6653	1.8657	1.53	1.470	1.848	1.568
1ST QUARTILE	:	39.0	3.1008	4.7974	219.95	30.874	12.938	9.890
2ND QUARTILE	:	57.0	4.6702	7.0295	269.22	38.165	22.830	16.250
3RD QUARTILE	:	83.0	6.0766	8.2206	362.72	49.390	29.290	18.460

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 2	
	ė#	KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINOMIA	PHOSPHOR	MANGANSE
		MG/M**2	MG/M×*2	MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M×*2
# OF SAMPLES	:	10.000	11.000	11.000	12.000	13.000	11.0000	10.0000
MAXIMUM	:	71.500	17.050	5.250	14.300	55.680	7.9200	1.0710
MUNIMUM	:	18.910	2.421	0.202	0.000	14.880	0.0426	0.0403
RANGE	:	52.590	14.629	5.048	14.300	40.800	7.8774	1.0306
ARITH. MEAN	:	41.768	6.360	2.026	4.352	34.406	1.4575	0.3085
ARITH. STD. DEV	:	19.705	4.579	1.624	3.924	12.477	2.2370	0.2908
GEOM. MEAN	:	37.823	5.286	1.370	3.206	32.163	0.6252	0.2192
GEOM. STD. DEV.	:	1.599	1.826	2.898	2.181	1.486	4.3811	2.4746
1ST QUARTILE	:	25.200	3.365	0.651	1.495	24.865	0.1933	0.1216
2ND QUARTILE	:	35.819	4.172	1.445	3.416	32.565	0.6305	0.2635
3RD QUARTILE	:	54.495	7.185	2.595	6.465	40.715	1.4045	0.2995

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M×*2	HG/M××2	MG/M**2	MG/M**2	HG/H××2	MG/M××2
# OF SAMPLES	:	11.0000	11.000	10.0000	11.0000	11.000	10.000	11.0000
MUMIXAM	:	0.1100	1.639	6.8670	0.7350	0.136	6.149	0.1449
MINIHUM		0.0155	0.146	0.7623	0.0726	0.031	0.989	0.0358
RANGE	:	0.0945	1.493	6.1047	0.6624	0.105	5.159	0.1091
ARITH. MEAN	:	0.0419	0.569	2.6323	0.3747	0.074	2.332	0.0831
ARITH. STD. DEV	:	0.0275	0.419	1.6694	0.2244	0.034	1.545	0.0345
GEOM. MEAN	:	0.0355	0.461	2.2578	0.3100	0.067	1.991	0.0764
GEOM. STD. DEV.	:	1.8129	1.969	1.7906	1.9909	1.633	1.769	1.5535
1ST QUARTILE	:	0.0195	0.260	1.4661	0.1905	0.039	1.133	0.0520
2ND QUARTILE	:	0.0339	0.457	2.5125	0.2659	0.068	2.020	0.0675
3RD QUARTILE	:	0.0476	0.581	2.7655	0.5317	0.095	2.540	0.1048

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH DUFFERIN/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 11.00000

MAXIMUM : 0.00930

MINIMUM : 0.00160

RANGE : 0.00770

ARITH. MEAN : 0.00492

ARITH. STD. DEV : 0.00214

GEOM. MEAN : 0.00445

GEOM. STD. DEV. : 1.64369

1ST QUARTILE : 0.00296

2ND QUARTILE : 0.00468

3RD QUARTILE : 0.00590

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		мм	MG/H**2	MG/N**2	MG/N**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	*	11.0	9.0000	9.0000	9.00	9.000	9.000	9.000
MUMIXAM	:	101.0	11.4112	13.9040	564.85	57.960	55.062	25.116
MINIMUM	:	14.7	1.2751	2.7481	147.00	19.950	16.800	6.390
RANGE	:	86.3	10.1361	11.1559	417.85	38.010	38.262	18.726
ARITH. MEAN	:	64.2	6.4608	9.2386	372.01	46.646	28.357	16.230
ARITH. STD. DEV	:	27.9	3.5335	4.0311	148.81	12.271	12.907	5.781
GEOM. MEAN	:	56.6	5.3218	8.2144	340.68	44.719	26.300	15.172
GEOM. STD. DEV.	:	1.8	2.0963	1.7573	1.60	1.399	1.480	1.511
1ST QUARTILE	:	33.1	3.3663	6.0505	232.83	41.175	20.290	12.080
2ND QUARTILE	ŧ	65.0	6.0968	9.0442	362.77	45.301	23.135	15.568
3RD QUARTILE	:	83.6	8.0603	11.2243	454.86	55.640	25.715	18.155

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR	MANGANSE
		MG/H**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	;	9.000	9.000	9.000	9.000	9.000	9.0000	9.0000
MUNIXAM	:	92.736	14.490	5.796	11.479	61.610	3.1878	0.6762
MINIMUM	÷	24.500	3.905	1.050	1.440	19.250	0.2450	0.1400
RANGE	:	68.236	10.585	4.746	10.039	42.360	2.9428	0.5362
ARITH. MEAN	:	51.583	7.779	3.138	5.289	40.504	1.3031	0.3330
ARITH. STD. DEV	:	20.462	3.790	1.834	3.070	15.376	0.8927	0.1771
GEOM. MEAN	:	48.104	7.063	2.634	4.473	37.738	0.9925	0.2959
GEOI1. STD. DEV.	;	1.493	,1.578	1.918	1.908	1.508	2.3835	1.6661
1ST QUARTILE	:	36.397	5.145	1.416	2.645	27.544	0.4611	0.2075
2ND QUARTILE	:	46.316	5.542	2.623	4.800	35.508	1.3580	0.2345
3RD QUARTILE	ŕ	56.450	8.626	3.820	6.030	48.355	1.5385	0.3834

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO	NOV 30,81						PAGE : 3	
		NICKEL		ZINC		IRON	LEAD		VANADIUM	ALUMINUM	COPPER
		MG/M**2		MG/M**2	М	G/M**2	MG/M**2		MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	9.0000		8.000		9.0000	9.0000		9.000	9.000	9.0000
MAXIHUM	:	0.2898		1.201	1	4.2968	1.0626		0.101	15.553	1.6229
MINIMUM	:	0.0175		0.391		1.0500	0.5050		0.031	0.693	0.0550
RANGE	:	0.2723		0.810	1	3.2468	0.5576		0.070	14.860	1.5679
ARITH. MEAN	:	0.0819		0.724		5.0228	0.6520		0.070	4.319	0.3463
ARITH. STD. DEV	:	0.0912		0.325	200	3.7524	0.1792		0.025	4.401	0.4888
GEOM. MEAN	:	0.0544		0.662		4.0843	0.6338		0.065	3.076	0.2077
GEOM. STD. DEV.	:	2.4369		1.573	1	1.9969	1.2739		1.526	2.368	2.6121
1ST QUARTILE	•	0.0322		0.440		2.9654	0.5270		0.046	1.663	0.1080
2ND QUARTILE	:	0.0377		0.652	9	4.2409	0.5680	•	0.071	3.587	0.1796
3RD QUARTILE	:	0.0565		1.006	Š	4.7515	0.6645		0.084	4.030	0.2350

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M××2

# OF SAMPLES : 9.00000

MAXIMUM : 0.01932

MINIMUM : 0.00395

RANGE : 0.01537

ARITH. MEAN : 0.01252

ARITH. STD. DEV : 0.00514

GEOM. MEAN : ' 0.01123

GEOM. STD. DEV. : 1.73092

1ST QUARTILE : 0.00832

2ND QUARTILE : 0.01326

3RD QUARTILE : 0.01430

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REF	PORT :	JAN 5, 82	TO JAN 4,83	<u> </u>			PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MM	MG/M**2	NG/M×*2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	13.0	12.0000	13.0000	13.00	13.000	12.000	11.000
MUMIXAM	•	143.0	19.1772	18.0774	647.35	88.660	74.260	26.070
MINIMUM	:	21.0	1.2654	1.7598	118.65	16.170	12.516	3.780
RANGE	:	122.0	17.9118	16.3176	528.70	72.490	61.744	22.290
ARITH. MEAN	:	78.2	8.0854	9.0965	362.41	52.121	30.490	17.630
ARITH. STD. I	DEV :	34.4	5.2768	4.6211	154.89	20.521	16.794	7.718
GEOM. MEAN	:	69.8	6.5216	7.8848	330.49	47.888	27.245	15.466
GEOM. STD. DE	EV. :	1.7	2.0770	1.8336	1.59	1.577	1.612	1.829
1ST QUARTILE	-	51.0	4.5869	6.4568	254.58	34.601	20.020	9.670
2ND QUARTILE	•	77.0	6.3184	7.7287	309.00	53.815	26.195	18.975
3RD QUARTILE	:	94.4	12.3744	10.3705	457.50	59.320	36.618	23.935

#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 2	
		KJELDAHL . AS N	MAGNESIM	POTASSIM	SODIUM	MUINOMMA	PHOSPHOR	MANGANSE
		MG/M**2	MG/H××2	MG/M**2	MG/M××2	AS N MG/M**2	HG/H**2	MG/M××2
# OF SAMPLES	:	12.000	13.000	13.000	11.000	13.000	10.0000	12.0000
MAXIMUM	:	97.240	39.000	11.440	13.052	62.920	3.8710	1.7380
MINIMUM	:	20.580	4.470	0.223	0.600	13.800	0.0000	0.0447
RANGE	:	76.660	34.530	11.216	12.452	49.120	3.8710	1.6933
ARITH. MEAN	:	52.357	10.265	3.333	5.098	34.132	0.7764	0.3521
ARITH. STD. DEV	:	24.537	9.509	3.208	4.477	16.059	1.1264	0.4442
GEOM. MEAN	:	47.258	8.103	2.159	3.128	30.538	0.5289	0.2436
GEOM. STD. DEV.	:	1.616	1.891	2.840	3.099	1.655	2.8625	2.2588
1ST QUARTILE	:	35.944	4.975	0.969	0.987	20.075	0.1085	0.1939
2ND QUARTILE	:	46.610	6.565	1.920	3.052	29.980	0.5497	0.2129
3RD QUARTILE	:	64.520	9.567	3.534	9.064	43.320	0.6945	0.3155

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STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83 PAGE : 3

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/H**2	MG/H××2	MG/M**2	MG/H××2	MG/N××2	MG/M××2	MG/M**2
# OF SAMPLES	•	12.0000	12.000	12.0000	12.0000	12.000	12.000	12.0000
MUMIXAM		0.1500	2.448	15.9580	1.0890	0.143	16.195	0.1615
MINIHUM	:	0.0105	0.221	1.2605	0.1660	0.021	1.171	0.0508
RANGE	•	0.1395	2.228	14.6975	0.9230	0.122	15.024	0.1106
ARITH. MEAN		0.0503	0.604	4.6024	0.5373	0.082	4.203	0.0989
ARITH. STD. DEV	•	0.0355	0.590	4.5582	0.2839	0.033	4.902	0.0365
GEOM. MEAN	٠	0.0416	0.489	3.2550	0.4678	0.074	2.672	0.0928
GEOM. STD. DEV.	:	1.9234	1.780	2.2767	1.7738	1.673	2.474	1.4546
1ST QUARTILE	:	0.0327	0.394	1.6048	0.3650	0.065	1.463	0.0675
2ND QUARTILE	:	0.0431	0.443	2.7600	0.4965	0.081	1.785	0.0939
3RD QUARTILE	:	0.0553	0.550	4.9862	0.6514	0.100	4.906	0.1251

STATION NAME : SOUTH CANFIELD/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 12.00000

MAXIMUM : 0.04970

MINIMUM : 0.00105

RANGE : 0.04865

ARITH. MEAN : 0.00860

ARITH. STD. DEV : 0.01308

GEOM. MEAN : 0.00534

GEOM. STD. DEV. : 2.41417

1ST QUARTILE : 0.00387

2ND QUARTILE : 0.00474

3RD QUARTILE : 0.00702

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STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT		: DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MM	HG/H**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	HG/M**2
# OF SAMPLES	:	10.0	4.0000	8.0000	10.00	10.000	3.000	7.000
MAXIHUM	•	112.0	8.4961	13.1264	716.17	92.307	106.400	70.810
MINIMUM		5.9	0.2532	0.8150	36.87	4.857	11.704	13.872
RANGE	:	106.1	8.2428	12.3114	679.31	87.450	94.696	56.938
ARITH. MEAN	:	56.0	3.6309	4.1645	365.20	43.488	60.518	40.492
ARITH. STD. DEV	:	35.8	3.4787	4.2568	224.27	29.937	47.416	19.663
GEOM. MEAN	:	41.8	2.0542	2.7119	283.06	32.284	42.911	36.039
GEOM. STD. DEV.	:	2.6	4.4264	2.6939	2.41	2.519	3.172	1.729
1ST QUARTILE	:	19.3	1.4481	1.3636	195.94	16.872	******	20.736
2ND QUARTILE	:	54.1	2.8871	2.2144	317.32	35.929	******	33.700
3RD QUARTILE	:	71.0	5.8137	6.1094	477.92	56.735	******	51.880

\*\*\*\* : INSUFFICIENT DATA

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 2	2
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	8.000	10.000	9.000	7.000	10.000	8.0000	8.0000
MUMIXAM	:	112.000	56.925	14.854	20.440	80.640	5.1100	1.5330
MUNIMUM	:	9.792	2.721	0.544	1.224	1.650	0.4700	0.2992
RANGE	:	102.208	54.204	14.310	19.216	78.990	4.6400	1.2338
ARITH. MEAN	:	55.625	26.024	5.346	8.935	36.998	1.8740	0.8011
ARITH. STD. DEV	:	36.421	20.621	4.612	5.984	26.267	1.5768	0.4138
GEOM. MEAN	:	44.128	18.315	3.760	6.960	25.095	1.3646	0.7113
GEOM. STD. DEV.	:	2.202	2.627	2.618	2.389	3.180	2.3791	1.6990
1ST QUARTILE	:	32.050	9.485	2.410	3.612	15.752	0.6175	0.5060
2ND QUARTILE	:	40.490	18.433	3.573	7.178	29.247	1.5960	0.7456
3RD QUARTILE	:	89.063	37.718	4.900	10.264	50.805	2.4926	1.0366

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81	*	65		PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUHINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	8.0000	6.000	7.0000	8.0000	8.000	7.000	6.0000
MAXIMUM	:	0.1460	5.059	28.5430	6.2599	0.112	15.476	1.6279
MININUM	:	0.0136	0.889	3.0872	0.0560	0.014	1.890	0.3754
RANGE	:	0.1324	4.169	25.4558	6.2039	0.098	13.586	1.2525
ARITH. MEAN	:	0.0662	2.227	13.8332	2.2514	0.067	8.255	0.7609
ARITH. STD. DEV	:	0.0472	1.518	8.6625	1.9421	0.032	4.746	0.4482
GEOM. MEAN	•	0.0502	1.874	11.3086	1.3224	0.058	6.788	0.6783
GEOM. STD. DEV.	:	2.3359	1.885	2.0885	4.1851	1.945	2.106	1.6465
1ST QUARTILE	:	0.0238	0.957	5.1626	1.0250	0.048	2.589	0.4552
2ND QUARTILE	:	0.0580	2.017	10.5673	1.7725	0.066	7.822	0.6116
3RD QUARTILE	:	0.1030	2.330	18.4147	3.0500	0.091	10.744	0.7368

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 8.00000

MAXIMUM : 0.04380

MINIMUM : 0.00235

RANGE : 0.04145

ARITH. MEAN : 0.02024

ARITH. STD. DEV : 0.01357

GEOM. MEAN : 0.01481

GEOM. SID. DEV. : 2.66588

1ST QUARTILE : 0.00832

2ND QUARTILE : 0.02261

3RD QUARTILE : 0.02696

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		нм	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	13.0	9.0000	12.0000	12.00	12.000	7.000	7.000
MAXIMUM	:	122.0	12.2000	13.0784	1424.00	161.600	139.120	75.250
HUMINIM	:	31.1	0.6503	1.6387	102.63	23.040	20.837	16.000
RANGE	:	90.9	11.5497	11.4397	1321.37	138.560	118.283	59.250
ARITH. MEAN	:	68.4	3.4163	4.8326	529.88	65.909	79.220	48.733
ARITH. STD. DEV	:	24.9	3.4380	3.1172	388.37	41.414	38.995	18.254
GEOM. MEAN	:	64.3	2.5031	4.0755	407.53	55.807	68.600	44.719
GEOM. STD. DEV.	:	1.5	2.2295	1.8421	2.23	1.824	1.895	1.643
1ST QUARTILE	:	51.0	1.6360	2.5464	303.45	33.080	31.618	26.910
2ND QUARTILE	:	63.8	2.2216	4.4896	391.71	57.990	79.840	50.310
3RD QUARTILE	:	77.0	3.2242	6.1844	752.75	75.295	96.250	55.720

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT		JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	MUINONHA	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/H**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	12.000	11.000	10.000	8.000	12.000	11.0000	12.0000
MAXIMUM	=	180.000	54.688	14.000	22.072	138.400	5.8400	2.4800
MINIMUM	:	9.810	4.354	0.622	1.800	13.056	0.2725	0.1244
RANGE	:	170.190	50.333	13.378	20.272	125.344	5.5675	2.3556
ARITH. MEAN	:	62.716	25.667	4.543	11.890	53.651	1.6489	0.9658
ARITH. STD. DEV	:	49.770	14.632	3.774	7.451	35.361	1.5675	0.6577
GEOII. MEAN	:	46.509	21.011	3.449	9.282	43.804	1.1517	0.7650
GEOM. STD. DEV.	:	2.325	2.101	2.260	2.341	2.001	2.4794	2.1801
1ST QUARTILE	:	25.780	11.860	2.398	6.455	36.290	0.4133	0.6630
2ND QUARTILE	:	52.100	22.937	3.510	10.732	41.690	1.1380	0.8109
3RD QUARTILE	:	90.995	31.990	4.497	18.437	71.380	1.9210	1.0920

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M××2	MG/M**2	MG/H**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	12.0000	12.000	12.0000	12.0000	12.000	12.000	12.0000
MUNIXAM	:	0.3500	6.416	30.2400	4.4000	0.192	17.200	1.1840
MUNIMUM	•	0.0155	0.572	3.0323	0.1220	0.031	1.956	0.1099
RANGE	•	0.3345	5.844	27.2077	4.2780	0.161	15.244	1.0741
ARITH. MEAN	•	0.0979	2.488	14.5471	1.9967	0.078	8.743	0.6162
ARITH. STD. DEV	:	0.1044	1.562	7.8973	1.4914	0.043	5.284	0.3461
GEOM. MEAN	:	0.0606	2.126	12.1177	1.3594	0.070	7.154	0.5043
GEOM. STD. DEV.	:	2.7590	1.808	2.0179	2.8964	1.617	2.025	2.0904
1ST QUARTILE	:	0.0255	1.684	10.0632	0.8662	0.054	4.829	0.3803
2ND QUARTILE	:	0.0561	2.004	13.6832	1.2446	0.071	7.530	0.6376
3RD QUARTILE	:	0.1440	2.472	19.8745	3.3960	0.084	12.794	0.8412

STATION NAME : TORONTO/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 11.00000

MAXIMUM : 0.04375

MINIMUM : 0.00200

RANGE : 0.04175

ARITH. MEAN : 0.02029

ARITH. STD. DEV : 0.01291

GEON. MEAN : 0.01454

GEOM. STD. DEV. : 2.80157

1ST QUARTILE : 0.00586

2ND QUARTILE : 0.01950

3RD QUARTILE : 0.02805

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		нн	MG/M**2	MG/N**2	MG/M**2	MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	11.0	11.0000	9.0000	10.00	10.000	10.000	10.000
MUMIXAM	:	111.0	12.7447	15.7070	692.07	70.700	69.207	39.117
MINIMUM	:	11.3	1.1300	2.8854	119.00	19.600	8.400	7.700
RANGE	:	99.7	11.6147	12.8216	573.07	51.100	60.807	31.417
ARITH. MEAN	:	67.4	6.8954	9.5767	402.37	51.263	26.305	15.576
ARITH. STD. DEV	:	33.2	3.9758	4.4138	181.45	16.800	17.429	9.107
GEOM. MEAN	:	57.1	5.4051	8.3953	355.91	48.108	22.299	13.973
GEOM. STD. DEV.	:	2.0	2.3063	1.8164	1.77	1.500	1.815	1.575
1ST QUARTILE	:	33.3	1.9193	5.6665	211.57	36.557	15.245	11.063
2ND QUARTILE		65.5	6.5844	9.1798	410.50	57.525	20.475	11.720
3RD QUARTILE	:	99.8	10.0114	11.8765	524.47	61.360	28.927	15.220

### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/H**2	MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M××2
# OF SAMPLES	:	8.000	10.000	9.000	8.000	10.000	8.0000	10.0000
MUNIXAM	:	64.640	11.033	3.050	8.928	104.312	1.2960	0.8024
MINIMUM	:	23.800	1.400	0.113	1.220	2.898	0.2020	0.0360
RANGE	Ė	40.840	9.633	2.937	7.708	101.414	1.0940	0.7664
ARITH. MEAN	•	48.042	5.218	2.076	3.535	45.055	0.6358	0.2963
ARITH. STD. DEV	:	15.464	2.656	1.045	2.501	27.647	0.3143	0.2162
GEOM. MEAN	:	45.611	4.591	1.535	. 2.912	33.945	0.5690	0.2250
GEOM. STD. DEV.	:	1.430	1.758	2.979	1.930	2.683	1.6913	2.3706
1ST QUARTILE	:	37.520	3.167	1.307	1,710	23.625	0.4725	0.1225
2ND QUARTILE	:	47.590	4.912	2.275	3.015	47.295	0.6126	0.2690
3RD QUARTILE	:	62.840	6.189	2.665	4.340	56.216	0.7090	0.3649

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#### STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M××2	MG/M**2	MG/M**2
# OF SAMPLES	:	10.0000	10.000	10.0000	10.0000	10.000	10.000	9.0000
MUNIXAM	:	0.2880	2.357	10.1303	1.2210	0.111	9.388	1.0317
MINIMUM	:	0.0157	0.281	0.9135	0.1890	0.031	0.546	0.0529
RANGE	•	0.2722	2.076	9.2168	1.0320	0.079	8.842	0.9788
ARITH. MEAN	:	0.0667	0.734	4.3268	0.5759	0.073	3.995	0.2819
ARITH. STD. DEV	:	0.0816	0.593	2.8120	0.2913	0.029	3.163	0.3066
GEOM. MEAN	:	0.0443	0.613	3.4957	0.5150	0.067	2.887	0.1880
GEOM. STD. DEV.	:	2.3745	1.766	2.0687	1.6613	1.573	2.463	2.5069
1ST QUARTILE	:	0.0210	0.415	1.8369	0.3931	0.042	1.561	0.0951
2ND QUARTILE	:	0.0423	0.567	3.7896	0.5145	0.071	2.600	0.1451
3RD QUARTILE	:	0.0530	0.686	5.5921	0.6331	0.100	5.509	0.2789

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STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADHIUM

MG/M\*\*2

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

# OF SAMPLES : 10.00000

MAXIMUM : 0.01220

MINIMUM : 0.00157

RANGE : 0.01062

ARITH. MEAN : 0.00653

ARITH. STD. DEV : 0.00334

GEOM. MEAN : 0.00568

GEOM. STD. DEV. : 1.82273

1ST QUARTILE : 0.00423

2ND QUARTILE : 0.00530

3RD QUARTILE : 0.00850

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MH	HG/II**2	MG/M**2	MG/M**2	MG/M××2	MG/M**2	MG/M**2
# OF SAMPLES	•	13.0	11.0000	13.0000	13.00	13.000	12.000	13.000
MUMIXAM	•	124.0	15.6107	16.6904	784.00	90.650	38.280	31.200
MUNINIM	:	22.5	1.9151	2.6730	119.70	25.875	10.038	5.850
RANGE	:	101.5	13.6956	14.0174	664.30	64.775	28.242	25.350
ARITH. MEAN	•	67.4	6.3800	7.4220	331.43	46.651	26.447	17.029
ARITH. STD. DEV	:	30.3	4.3878	3.8608	190.77	21.536	9.506	8.191
GEOM. MEAN	:	60.9	5.2566	6.6301	288.54	42.821	24.374	15.281
GEOM. STD. DEV.	•	1.6	1.9112	1.6313	1.72	1.518	1.582	1.635
1ST QUARTILE	•	44.5	3.0392	4.7287	186.79	30.295	20.620	11.188
2ND QUARTILE	•	62.0	4.4149	5.8981	277.30	37.710	28.115	14.055
3RD QUARTILE	•	76.2	7.0367	8.7927	351.50	51.070	32.500	20.645

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR	MANGANSE
		MG/M××2	MG/M××2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	11.000	13.000	12.000	12.000	12.000	11.0000	12.0000
MUHIXAM	•	71.040	22.500	14.400	11.025	59.200	3.3180	0.8120
MINIMUM	:	17.100	2.151	0.570	1.155	9.000	0.0640	0.0358
RANGE	:	53.940	20.349	13.830	9.870	50.200	3.2540	0.7761
ARITH. MEAN	:	44.127	6.832	4.598	4.709	32.865	0.8937	0.3161
ARITH. STD. DEV	ï	17.117	5.149	4.284	2.699	15.277	0.9099	0.2023
GEOM. MEAN	:	40.843	5.648	3.063	3.971	28.985	0.5273	0.2483
GEOM. STD. DEV.	:	1.537	1.864	2.651	1.918	1.759	3.3861	2.2925
1ST QUARTILE	:	27.668	3.730	1.680	3.155	21.767	0.1838	0.2135
2ND QUARTILE	:	42.485	6.060	3.165	4.352	33.735	0.7184	0.2850
3RD QUARTILE	:	51.970	7.392	6.720	5.645	42.225	1.0900	0.3772

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M×*2	MG/M××2	MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	13.0000	11.000	11.0000	13.0000	12.000	11.000	12.0000
MAXIMUM	:	0.1800	1.938	6.0180	1.6120	0.124	4.594	0.3324
MUNINIM	:	0.0112	0.134	1.3955	0.2025	0.022	1.162	0.0516
RANGE	:	0.1687	1.804	4.6225	1.4095	0.101	3.432	0.2808
ARITH. MEAN	:	0.0467	0.640	3.0408	0.4763	0.068	2.380	0.1290
ARITH. STD. DEV	•	0.0426	0.541	1.6160	0.3705	0.032	1.111	0.0866
GEOM. MEAN	:	0.0369	0.479	2.6833	0.3989	0.061	2.165	0.1067
GEOM. STD. DEV.	:	1.9462	2.206	1.6868	1.7634	1.659	1.573	1.8873
1ST QUARTILE	:	0.0272	0.258	1.4774	0.2376	0.044	1.439	0.0569
2ND QUARTILE	:	0.0364	0.386	2.3327	0.3731	0.068	1.789	0.1035
3RD QUARTILE	:	0.0393	0.862	4.0282	0.4605	0.079	2.909	0.1842

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : VILLA NOVA/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M×\*2

# OF SAMPLES : 13.00000

MAXIMUM : 0.01020

MINIMUM : 0.00112

RANGE : 0.00907

ARITH. MEAN : 0.00475

ARITH. STD. DEV : 0.00237

GEOM. MEAN : 0.00420

GEOM. STD. DEV. : 1.72503

1ST QUARTILE : 0.00325

2ND QUARTILE : 0.00381

3RD QUARTILE : 0.00596

# <u>PART VI</u> <u>SUMMARY STATISTICS OF WET DEPOSITION BY REGION</u>

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81	8			PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/M**2	MG/M××2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	•	66.0	63.0000	57.0000	57.00	58.000	56.000	58.000
MAXIMUM	:	188.8	16.4438	21.2211	1060.80	134.160	134.160	75.075
MININUM	ŧ	11.3	0.8983	2.4740	106.65	18.630	8.400	4.000
RANGE	:	177.5	15.5455	18.7471	954.15	115.530	125.760	71.075
ARITH. MEAN		69.4	6.0963	9.2309	409.64	52.154	33.292	18.386
ARITH. STD. DEV	:	36.3	3.8149	4.4868	205.99	21.363	24.174	11.808
GEOM. MEAN	•	58.8	4.7727	8.0806	360.15	48.079	27.531	15.804
GEOM. STD. DEV.	:	1.9	2.1546	1.7333	1.70	1.518	1.814	1.714
1ST QUARTILE	:	35.5	2.2929	6.3012	271.78	_ 40.936	18.395	11.105
2ND QUARTILE	•	70.5	5.8281	8.6239	376.81	49.566	26.960	16.075
3RD QUARTILE	:	92.1	8.6491	11.5397	516.79	59.189	36.160	20.454

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81				PAGE: 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR	MANGANSE
		MG/M××2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M××2
# OF SAMPLES	:	55.000	58.000	58.000	55.000	58.000	54.0000	58.0000
MUNIXAM	:	249.600	23.075	15.300	14.686	165.360	12.7920	1.5620
MINIMUM	ż	21.870	1.400	0.062	0.670	2.898	0.0990	0.0318
RANGE	ž	227.730	21.675	15.238	14.016	162.462	12.6930	1.5302
ARITH. MEAN	:	66.585	7.549	3.410	4.473	54.069	1.4260	0.4067
ARITH. STD. DEV	*	39.051	4.752	2.846	3.337	30.821	1.9207	0.3073
GEOM. MEAN	:	58.729	6.285	2.324	3.361	45.967	0.8892	0.3129
GEOM. STD. DEV.	:	1.628	1.855	2.752	2.200	1.871	2.5849	2.1580
1ST QUARTILE	:	42.819	4.059	1.065	1.711	32.860	0.4887	0.2115
2ND QUARTILE	:	56.692	5.889	2.880	3.320	45.811	0.9360	0.3285
3RD QUARTILE	:	73.380	9.576	4.375	6.210	61.989	1.4520	0.4672

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STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81 PAGE : 3

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUHINUM	COPPER
		MG/M**2	MG/H**2	MG/M**2	MG/M××2	MG/M**2	MG/M×*2	MG/M**2
# OF SAMPLES	:	58.0000	57.000	57.0000	58.0000	58.000	58.000	53.0000
MAXIMUM		0.2898	2.677	23.1829	1.7160	0.189	35.784	2.2051
MINIMUM	:	0.0135	0.281	0.6241	0.1890	0.027	0.323	0.0429
RANGE	:	0.2763	2.396	22.5588	1.5270	0.162	35.461	2.1621
ARITH. MEAN	:	0.0611	0.830	5.6220	0.6905	0.076	5.311	0.3639
ARITH. STD. DE	v :	0.0567	0.469	4.8295	0.2955	0.033	6.085	0.4794
GEOM. MEAN	:	0.0467	0.730	4.0948	0.6373	0.069	3.393	0.2087
GEOM. STD. DEV		1.9983	1.643	2.2910	1.4933	1.581	2.598	2.7268
1ST QUARTILE	•	0.0307	0.467	2.7281	0.4970	0.048	1.628	0.1023
2ND QUARTILE	:	0.0433	0.726	4.3806	0.6005	0.072	3.587	0.1814
3RD QUARTILE		0.0631	0.976	6.4807	0.8285	0.097	5.862	0.3714

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M××2

# OF SAMPLES : 55.00000

MAXIMUM : 0.03290

MINIMUM : 0.00157

RANGE : 0.03132

ARITH. MEAN : 0.01051

ARITH. STD. DEV : 0.00712

GEOM. MEAN : 0.00842

GEOM. STD. DEV. : 2.00063

1ST QUARTILE : 0.00492

2ND QUARTILE : 0.00900

3RD QUARTILE : 0.01410

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE: 1	
		PRECIP.	FREE H+ Lab	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		ММ	MG/M**2	MG/I1**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	77.0	70.0000	76.0000	76.00	76.000	72.000	72.000
MAXIHUM	:	143.0	19.1772	22.1652	840.00	125.160	80.300	43.710
MINIHUM		19.0	0.0667	1.1410	91.20	9.520	10.038	3.780
RANGE	:	124.0	19.1105	21.0242	748.80	115.640	70.262	39.930
ARITH. MEAN	:	70.2	6.5004	7.8565	331.73	46.088	30.211	17.377
ARITH. STD. DEV	:	31.8	4.5958	4.6537	165.76	21.201	15.926	8.029
GEOM. MEAN	•	62.7	4.5725	6.4811	294.54	41.739	26.661	15.518
GEOM. STD. DEV.	:	1.7	2.9061	1.9513	1.64	1.574	1.654	1.647
1ST QUARTILE	:	45.5	3.3577	4.7695	209.85	30.960	19.930	11.120
2ND QUARTILE	:	65.6	4.8422	6.8824	290.90	41.050	26.895	16.495
3RD QUARTILE	4	84.6	8.8365	10.2496	423.15	57.770	35.568	22.445

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 4,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	PHOSPHOR	MANGANSE
		MG/N**2	MG/M**2	MG/M**2	MG/M××2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	67.000	73.000	74.000	69.000	76.000	63.0000	69.0000
MAXIMUM	:	147.000	39.000	23.882	14.300	95.760	9.5200	1.7380
MUNIMUM	:	4.860	1.425	0.154	0.000	8.424	0.0000	0.0308
RANGE	:	142.140	37.575	23.728	14.300	87.336	9.5200	1.7071
ARITH. MEAN	:	49.860	7.489	3.767	4.791	38.110	1.1682	0.3679
ARITH. STD. DEV	:	24.929	5.558	4.077	3.549	18.352	1.9223	0.3375
GEOM. MEAN	:	43.875	6.239	2.327	3.519	33.559	0.5480	0.2636
GEOM. STD. DEV.	:	1.719	1.794	2.901	2.307	1.708	3.4914	2.3425
1ST QUARTILE	:	31.438	4.597	1.445	1.747	24.151	0.2564	0.1905
2ND QUARTILE	:	43.320	6.062	2.140	4.043	35.110	0.5547	0.2710
3RD QUARTILE	:	64.435	8.051	4.840	7.056	48.845	1.0417	0.3710

#### STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT	: JAN 5	, 82	TO	JAN	4,83	PA	GE :	3	

		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M××2	MG/M××2
# OF SAMPLES	:	72.0000	68.000	68.0000	72.0000	70.000	66.000	71.0000
MAXIMUM	:	0.1800	2.448	22.4640	2.1420	0.143	16.195	0.6812
MUHIHIM	:	0.0095	0.134	0.7623	0.0205	0.019	0.381	0.0355
RANGE	:	0.1705	2.315	21.7017	2.1215	0.124	15.814	0.6458
ARITH. MEAN	:	0.0448	0.613	3.9139	0.4896	0.074	2.993	0.1141
ARITH. STD. DEV	:	0.0299	0.451	3.8225	0. 3399	0.032	2.713	0.0939
GEOM. MEAN	•	0.0378	0.505	2.9490	0.4003	0.066	2.301	0.0937
GEOM. STD. DEV.	:	1.7938	1.838	2.0105	1.9755	1.647	1.989	1.7981
1ST QUARTILE	:	0.0295	0.360	1.6155	0.2680	0.051	1.408	0.0602
2ND QUARTILE	:	0.0383	0.476	2.8062	0.4310	0.072	2.132	0.0932
3RD QUARTILE	:	0.0527	0.724	4.2575	0.6033	0.097	3.336	0.1292

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HALDIMAND-NORFOLK REGION(NEMP)/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 4,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 72.00000

MAXIMUM : 0.09567

MINIMUM : 0.00105

RANGE : 0.09462

ARITH. MEAN : 0.00764

ARITH. STD. DEV : 0.01222

GEOM. MEAN : 0.00526

GEOM. STD. DEV. : 2.09403

1ST QUARTILE : 0.00347

2ND QUARTILE : 0.00540

3RD QUARTILE : 0.00710

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81				PAGE: 1	
		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE	CALCIUM	CHLORIDE
		мм	MG/H**2	MG/M**2	MG/M××2	AS N MG/M**2	MG/M××2	MG/M**2
# OF SAMPLES	:	33.0	33.0000	29.0000	31.00	30.000	29.000	24.000
MAXIMUM	•	147.0	11.0223	14.5696	681.60	77.720	82.080	22.800
MINIHUM	:	7.0	0.0667	1.8624	36.05	13.300	3.100	3.360
RANGE	*	140.0	10.9556	12.7072	645.55	64.420	78.980	19.440
ARITH. MEAN	•	63.3	4.3070	7.4139	280.06	31.017	17.415	9.809
ARITH. STD. DEV	:	41.3	2.9629	3.9307	175.81	15.895	16.219	4.763
GEOM. MEAN	:	48.8	3.0226	6.3687	226.09	27.747	12.769	8.746
GEOM. STD. DEV.	:	2.2	2.8584	1.7982	2.03	1.597	2.215	1.643
1ST QUARTILE	:	32.0	1.5679	4.1604	139.80	19.235	7.370	5.800
2ND QUARTILE	:	49.5	3.5520	6.7453	196.67	24.780	13.075	9.140
3RD QUARTILE	:	91.0	5.6240	9.3716	377.95	40.310	18.240	12.975

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT		DEC 31, 80	TO NOV 30,81				PAGE: 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AHMONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M××2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	29.000	29.000	25.000	25.000	31.000	27.0000	24.0000
MAXIMUM	:	100.320	12.540	7.980	11.760	79.800	4.7880	0.7920
MINIMUM	:	0.670	0.420	0.820	1.220	3.920	0.0840	0.0330
RANGE	:	99.650	12.120	7.160	10.540	75.880	4.7040	0.7590
ARITH. MEAN	:	39.946	3.561	3.265	5.680	32.702	1.0926	0.2572
ARITH. STD. DEV	;	26.909	3.143	2.330	3.538	20.951	1.3294	0.2119
GEOM. MEAN	:	29.747	2.447	2.535	4.573	25.793	0.5945	0.1871
GEOM. STD. DEV.	:	2.626	2.507	2.098	2.029	2.131	3.0139	2.3241
1ST QUARTILE	:	19.742	1.125	1.405	2.720	15.582	0.2230	0.0980
2ND QUARTILE	:	31.770	2.785	2.210	4.500	26.115	0.4760	0.1935
3RD QUARTILE	:	53.040	3.400	4.540	8.610	48.986	1.3020	0.3110

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	DEC 31, 80	TO NOV 30,81				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M×*2	MG/M××2	MG/M**2
# OF SAMPLES	:	24.0000	22.000	24.0000	26.0000	26.000	23.000	23.0000
MAXIMUM	:	2.4990	2.354	27.7440	3.8220	0.147	17.472	5.4978
MINIMUM	:	0.0160	0.162	2.1338	0.0670	0.028	0.462	0.1331
RANGE	:	2.4830	2.193	25.6102	3.7550	0.119	17.010	5.3647
ARITH. MEAN	•	0.5077	1.092	6.4310	0.8021	0.076	3.589	0.9679
ARITH. STD. DEV	:	0.6644	0.611	5.6349	0.9121	0.038	3.964	1.2062
GEOM. MEAN	:	0.2222	0.910	5.0628	0.5300	0.066	2.229	0.6102
GEOM. STD. DEV.	•	4.0814	1.952	1.9218	2.4776	1.695	2.675	2.5031
1ST QUARTILE	:	0.0775	0.563	2.9554	0.3020	0.041	0.999	0.3046
2ND QUARTILE	•	0.2365	0.947	4.2870	0.4900	0.066	1.677	0.4867
3RD QUARTILE	:	0.6420	1.576	8.6120	0.8860	0.102	5.423	0.9351

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO NOV 30,81

CADMIUM

MG/M\*\*2

# OF SAMPLES : 24.00000

MAXIMUM : 0.17640

MINIMUM : 0.00410

RANGE : 0.17230

ARITH. MEAN : 0.03137

ARITH. STD. DEV : 0.03834

GEOM. MEAN : 0.01915

GEOM. STD. DEV. : 2.71351

1ST QUARTILE : 0.00650

2ND QUARTILE : 0.02470

3RD QUARTILE : 0.03800

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 5,8	3			PAGE : 1	Ĺ
		PRECIP.	FREE H+ LAB	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
		ММ	MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	39.0	38.0000	35.0000	37.00	37.000	36.000	31.000
MAXIMUM	:	140.0	11.6876	14.1930	498.00	83.655	30.720	39.294
MUNIMUM	:	8.0	0.0896	0.4672	20.00	3.520	1.000	1.120
RANGE	:	132.0	11.5979	13.7258	478.00	80.135	29.720	38.174
ARITH. MEAN	;	55.0	3.8043	5.2623	188.49	27.894	10.854	9.639
ARITH. STD. DEV	:	36.1	2.9030	3.5294	117.65	18.406	7.344	9.201
GEOM. MEAN	:	44.5	2.7344	4.1931	153.27	22.609	8.543	6.560
GEOM. STD. DEV.	:	2.0	2.6282	2.0745	2.03	1.985	2.112	2.511
1ST QUARTILE	:	25.0	1.6379	2.4533	108.17	15.840	5.270	3.460
2ND QUARTILE	:	43.5	3.2923	4.3376	153.77	20.715	9.038	6.650
3RD QUARTILE	:	70.1	4.5249	6.5139	224.17	33.840	14.030	11.975

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#### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 5,83				PAGE : 2	
		KJELDAHL AS N	MAGNESIM	POTASSIM	SODIUM	AMHONIUM	PHOSPHOR	MANGANSE
		MG/M**2	MG/M**2	MG/M**2	MG/M×*2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	32.000	36.000	32.000	31.000	35.000	30.0000	33.0000
HAXIMUH	:	88.480	4.704	7.840	20.443	63.600	4.1440	0.3840
MINIMUM	:	5.280	0.250	0.000	0.460	1.250	0.0220	0.0250
RANGE	:	83.200	4.454	7.840	19.983	62.350	4.1220	0.3590
ARITH. MEAN	:	29.621	1.882	2.141	4.950	23.288	0.6220	0.1507
ARITH. STD. DEV	:	19.563	1.198	1.974	5.264	15.701	0.8151	0.0864
GEOM. MEAN	:	24.118	1.472	1.399	2.849	17.872	0.3583	0.1287
GEOM. STD. DEV.	:	1.956	2.160	2.896	3.068	2.296	3.0077	1.7987
1ST QUARTILE	:	17.345	0.774	0.692	0.967	12.431	0.2026	0.0820
2ND QUARTILE	:	22.675	1.814	1.675	3.170	18.860	0.3775	0.1248
3RD QUARTILE	:	41.526	2.787	2.720	6.530	28.975	0.7277	0.1825

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### ONTARIO MINISTRY OF THE ENVIRONMENT SUMMARY STATISTICS OF CALCULATED DEPOSITIONS APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT	:	JAN 5, 82	TO JAN 5,83				PAGE: 3	
		NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
		MG/M**2	MG/M**2	MG/H**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	33.0000	33.000	33.0000	34.0000	33.000	34.000	33.0000
MAXIHUM	:	1.5960	1.365	11.0200	1.5600	0.129	8.576	3.5492
MINIMUM	:	0.0114	0.065	0.7902	0.0560	0.008	0.226	0.0362
RANGE	ž	1.5846	1.300	10.2298	1.5040	0.121	8.350	3.5130
ARITH. MEAN	:	0.1124	0.426	2.8647	0.5150	0.057	2.080	0.2874
ARITH. STD. DEV	:	0.2736	0.282	2.1035	0.4015	0.034	1.772	0.6301
GEOM. MEAN	:	0.0510	0.344	2.3374	0.3779	0.048	1.502	0.1459
GEOM. STD. DEV.	:	2.8482	2.003	1.8708	2.3231	1.930	2.362	2.5479
1ST QUARTILE	:	0.0258	0.201	1.6638	0.1960	0.027	0.899	0.0764
2ND QUARTILE		0.0472	0.353	1.8655	0.3925	0.048	1.548	0.1358
3RD QUARTILE	:	0.0740	0.574	3.8293	0.6860	0.070	2.458	0.2044

STATION NAME : SUDBURY REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 82 TO JAN 5,83

CADMIUM

MG/M\*\*2

# OF SAMPLES : 34.00000

MAXIMUM : 0.06840

MINIMUM : 0.00080

RANGE : 0.06760

ARITH. MEAN : 0.00921

ARITH. STD. DEV : 0.01421

GEOM. MEAN : 0.00510

GEOM. STD. DEV. : 2.71125

1ST QUARTILE : 0.00250

2ND QUARTILE : 0.00487

3RD QUARTILE : 0.00770

PAGE : 4

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TD 195.54 .06 A562 1985 Annual statistics of concentration and deposition - cumulative precipitation sites in industrial/urban areas in Ontario

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